

ECONOMICS.

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ECONOMICS.

CONTENTS

BOOK I

BY

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PREFACE.

THE object of this book is to present a complete working manual for students and instructors. In its preparation the writer has aimed to cover the entire field of economics and to present all of the elements of the science in a clear and concise manner, hence he has made no attempt to elaborate particular theories, believing it to be better to present only principles that have become permanently established.

For it is conceded by all able instructors of economics that the controverted points, involving long and perhaps tedious discussion and analysis, should be studiously avoided by those making a formal beginning of the science. It is also considered best to give the beginner a survey of the entire field before allowing him to enter upon special studies. These points have been carefully observed by the writer in his class-room and in the preparation of this book. The arrangement of the subject-matter in the book corresponds to the order of instruction in the class-room.

On account of the wide scope of the book it is of a necessity much condensed, but this does not detract from its qualities as a model text-book, which should consist of a well-arranged course of study, with the leading principles of each subject presented in short paragraphs. The text is thus readily supplemented by library reading, and investigation. As a first book should be clear, the writer has endeavored to present every economic topic in a fair and proportional manner, and at the same time to observe a simple and direct style.

Owing to the excellent bibliographies now published it is no longer necessary to make an extended list of references in an ordinary text, therefore only a few of the most common standard works have been referred to at the close of each chapter, which may furnish parallel and explanatory readings on the subjects included in the chapter.

Book V is placed in the text for the purpose of encouraging concrete investigation, a practice greatly needed in these days in order to render economics of great public service and to verify and illustrate economic principles. With this text in hand, accompanied with more extended discussions by the instructor of special subjects such as the theories of *value*, *rent*, *interest*, *wages*,

profits, and distribution ; and of transportation, taxation, money, trade unions, and labor organizations, and with collateral reading, the student will have a thorough preparation in the elements of economics.

The writer wishes to acknowledge the valuable assistance of Professor R. W. Cone, of the University of Kansas, in reading manuscript and proof-sheets.

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BOOK I.

THE NATURE AND SCOPE OF POLITICAL ECONOMY.

CHAPTER I.

NATURE AND DEVELOPMENT OF ECONOMIC LIFE.

Nature of Economic Life.

A part of the general activity of society is called the economic life, because it treats of the efforts of man to obtain and use material things called economic goods. There is, strictly speaking, but one life of man, including his entire activities, individual and social. But in the consideration of the different phases of this life it is convenient to designate a social, individual, intellectual, moral, religious, political, or economic life. Economic life underlies all other activities. It represents man's struggle to improve his material welfare. It began with the struggle to satisfy hunger, and to protect against cold, and has continued as the constant factor in the struggle of the race for supremacy. While the economic life may not be considered the most cherished part of our higher civilization, it is the most essential. It is a great means to a greater end, and has the most important consideration of any phase of human life.

Observe the activities of modern society in which we live, and it will be found that each individual is struggling to obtain for himself a larger share of economic goods. The daily wage-earner, the man working on a salary, the manager of the business, the capitalist who furnishes the means of business, and the person endeavoring to make the world better, each is striving to obtain economic goods.

or wealth to satisfy his ends. Indeed the larger part of the time of man is spent in obtaining food, clothing, and shelter, for these wants must be satisfied before the higher products of civilization can be realized. Even should literary culture, æsthetic taste, religious fervor, or philanthropic sentiment represent the fruitage of the best life, yet the struggle for material goods is the uncompromising essential of human existence. This activity in obtaining and using material goods is called the economic life.

Unconscious Coöperation of Society.

The economic life is both individual and social. Man works independently to satisfy wants, or he works with his fellows for the same purpose. The older is civilization and the more prolonged the struggle, the more men work together or coöperate in the production of economic goods or wealth. In one sense it is well to speak of the individual power and the independence of man; in another it is necessary to consider him as dependent upon his fellows. He might say: "By my own efforts have I obtained all this wealth; by my own efforts have I accumulated this store of knowledge and risen to this position in life." Yet from another standpoint it is true that without the coöperation of his fellows he would have accomplished but little, for while he has been seeking his own interests he has been unconsciously coöperating with his fellows. There is such a division of labor in the accumulation of wealth that a man is dependent upon the whole world for the wealth which he enjoys.

Consider the simple life of an ordinary laborer, and while his services are essential to the production of social wealth, observe how much he depends upon others for what

he uses. From the tailor or clothier he receives his clothing; from the grocer or butcher his food; and from the furniture dealer the articles for his household. But follow out the conditions further, and we see that the tailor depends upon the weaver, and the weaver upon the farmer who supplies wool and cotton. In each case the farmer, weaver, and tailor are dependent upon the baker, clothier, and all others in connection with them. The grocer obtains his flour from the miller, and the miller the wheat from the farmer, and the machinery to run the mill from the machinist. The grocer obtains sugar from the refinery, which receives it from the factory and plantation. Even the spices, which form rather an insignificant part of the necessities of life, have passed through many groups of hands before they are furnished to the consumers. Thus the ordinary laborer has the whole world waiting on him in exchange for the labor he furnishes.

Thus all the activities of the economic life are woven together into an intricate web, and the individual who apparently works alone, independently seeking his own welfare, is in reality a coöperative creature, working in connection with thousands in providing the necessities and luxuries of life. His service to the world may be nothing more than polishing a boot-heel or cutting bolts in the machine shop, but for this service he receives his reward in a multitude of ways.

Competing with his fellows in a special occupation, he coöperates with them in general production. Competition of class with class is after all but a method of the division of labor, for while the farmer class is furnishing the raw material for other groups, farmers are receiving clothing and implements and manufactured articles from other

groups. The independence of the farmer has become proverbial only because he possesses the means of the food-supply and furnishes the raw material, and possibly because, having the food-supply and raw material, he may become a manufacturer and supply his needs in a meager way. But in the complexity of modern life he is no more independent than members of other groups. He may isolate himself and live a slow, independent, and non-progressive life, if he will, but he is not apt to turn civilization back upon itself in this way. He is as much affected by division of labor as other groups, and indeed on account of the modern appliances to farming it may be said economically that he is a manufacturer of grain, fruit, vegetables, wool, cotton, and sugar.

Conscious Coöperation of Society.

Although the coöperation of individuals in economic life began unconsciously, it has led to the necessity of conscious coöperation. Men lay plans and work together in the production, distribution, and exchange of wealth. This coöperation is mostly carried on in groups of individuals which have some special interests in the same thing. Thus, a group of laborers unite in an attempt to advance their own wages and their own interests, and to receive a larger share of the net product of industry. Another group of laborers unite in a special enterprise of creating a given line of economic goods, such as boots and shoes, while another group of people unite in a coöperative industry of trade, and still another group unite and form a bank, by which they aid the processes of exchange in wealth-creating. Others unite in mining enterprises, railroad-building, or other great industries where one person

feels unable to cope with circumstances; and finally we may say the state itself coöperates with all industries within the boundary of its own jurisdiction. Thus we have, besides the involuntary or unconscious coöperation of individuals in the production of wealth, an organized or conscious coöperation of individuals in groups carrying on special industries. This latter tends to enforce more clearly the idea of economic interdependence of individuals.

Simplicity of Early Economic Life.

At first the economic life of man was very simple. Single-handed he began the struggle to satisfy hunger and protect himself against the cold. In primitive social conditions man's selfish nature was laid bare. He began his career by finding things, and the finder was possessor and owner if he had the strength to defend his property. Roots and berries and the leaves of trees, with other bits of food that fell to his lot, he devoured to sustain life. He was but a wanderer, living an uncertain, nomadic life, with no settled place of abode and without regularity of movements. Life was precarious, for he was gorged at one time and starved at another. His shelter was often temporary; rocks and caves or rude huts of bark and branches were his habitations. Even his improvised garments gave incomplete protection to the body from the rigors of the cold and the heat of the sun.

Hunting and Fishing.

Later, man learned to catch fish and game, and hunted or fished in packs or hordes. These new industries had immense consequences in the development of the human race. In the first place, they gave additional food-supply,

which left some leisure for the making of instruments and implements and the creation of better houses for protection. An increased food-supply always gives to men means of improvement; it is the first step forward in material civilization. In the second place, it developed an adroitness or skill in the struggle for existence. The perpetual struggle in the accumulation of wealth has been along the line of the mastery of nature. As a man learns to master or outwit it, he adds the means of his own material welfare and develops intellect. And finally, it may be said that fishing and hunting led to association in wealth-producing, and finally developed unconscious co-operation in obtaining food. Implements were made and devices contrived by means of which to accomplish these ends with greater ease and certainty.

Domestication of Animals.

After a while man enters a higher state of existence, and increases his food-supply by the domestication of animals which furnish him meat and milk and service as well. This adds greatly to his leisure, and to a more complete social development. The race has multiplied into great family groups, which settle down in the more or less permanent conditions to hunt and fish and tend their flocks. Wealth is now more easily created and consequently more abundant, and there is less necessity for want and strife. The social organization of men becomes more compact, and the conditions of labor begin to prevail. This leads to more definite coöperation in wealth-producing.

Agriculture.

Soon a new period of progress is entered upon as the knowledge of seed-planting and harvest leads to agricul-

ture. The fertile soil now adds to the food product and increases the means of human welfare, making possible a more perfect economic life. Man is rapidly becoming a coöperative animal. His residence becomes fixed, and his wandering ceases. Settled laws and customs prevail, and the tribal ownership of land gives security to all. More goods can now be acquired than are needed for bare subsistence, and the conveniences and comforts of life appear. New economic relations spring up, and the divisions of labor begin to be prominent as each follows a special occupation. In its effect upon civilization agriculture has a vast influence in developing a more perfect social life and a better political organization.

Manufactures.

With increased food-supply the desires of men for a variety of implements, instruments, wearing apparel, and a larger equipment of dwellings, demand the especial services of part of the community in manufactures. And so we find that individuals employ their whole time in the creation of certain lines of goods to exchange for goods of other lines.

Trade.

This creation of more goods than can be used by the producer leads to trade. The surplus goods of each individual of each group are now exchanged for articles more desirable, and barter, the first form of exchange, appears. As society becomes more complex, the method of barter is too clumsy for carrying on the trade of different communities. This leads to the introduction of money, which becomes an instrument of exchange. Usually, money was some common commodity whose value was quite well

known to all traders or exchangers of goods. By means of the use of money, trade was greatly stimulated, and consequently manufacturing increased. In seeking those articles which are most desirable for money on account of convenience when large values must be considered, the tribes of the nations of the world finally adopted the precious metals as money.

Commerce.

The habit of exchanging surplus goods leads to the development of commerce, which brings a special group of people to attend to the work of trading. Not only do individuals deal with individuals, but tribes with tribes, and nations with nations. Caravans are used on land and ships on sea for carrying the surplus goods, and each new exchange stimulates desire and develops the energy of men in supplying wants already created. Thus does the economic life become broadened and the desire of men for more wealth becomes intensified.

Economic Organizations.

In the early period of development we find society arranging its own economic groups,—the agriculturists, or those who till the soil; shepherd class, or those who tend the flocks and herds; and the trading or merchant class. But we find those who, on account of their skill, spend their entire time in the manufacture of goods. The two latter classes divide into many special groups, the traders dealing in a single article or group of articles, and the manufacturers confining their skill to a single product or group of products. As economic society grows more complex, the manufacturers and traders group themselves in towns and cities. The farmers are usually collected in villages

and country hamlets. Economic life shifts again, and the manufacturers and laborers in special industries live together, and subsequently become organized into guilds, which represent the first artificial industrial organizations. As the number and kinds of industries multiply and the divisions of labor increase, society tends more and more to arrange itself in groups. The small towns and villages grow into great cities, which become the means of new associations. The guilds in these cities represent the organization of the manufacturers and laborers in the same commodity or the same industry in one group for their own protection and for the advancement of their own interests. The importance of all these divisions of labor is seen in the rapid development of economic society in all branches. Wealth is rapidly increased by the facilities for its production and the excited desire of mankind everywhere for a larger supply of economic goods. Men have more to live for, more to live upon, and yet are more dependent upon the exertions of their fellows for what they accomplish in the general processes of production.

Industrial Stage.

With the impetus now given to economic life, man enters upon what is known as the industrial stage, which continues to the present. Prior to this, nearly all of the manufacture of articles was dependent upon the muscular efforts of man and beast. Machinery was used to a limited extent, but the chief manufacture was by hand. However, the introduction of power manufacture was the beginning of a new industrial life. By the use of machinery and the control of the powers of nature, rapidity of manufacture was increased a hundred fold. This caused the introduction

of new methods of production, and changed to a great extent the conditions of economic life.

Industrial Revolution.

The result of the introduction of machinery was, that instead of the manufacturer working in his home, surrounded by his apprentices and journeymen, great factories were established, with improved machinery, in which were congregated large groups of laborers who worked for wages. Buildings and machinery were provided by the combined efforts of capitalists, and laborers worked under the direction of a master. Economic society now arranges itself in new groups or classes: there are laborers, managers, and capitalists.

Under the old method goods were manufactured in the shop in small quantities and placed in stock for sale. Under the new method large quantities of goods are created in a single factory and sold to dealers. The laborers receive their remuneration in the form of a daily wage and supply their own homes, living apart from the manufacturers and capitalists. In fact a large number of the manufacturers of the old method became laborers in the factories under the new. This was the formal beginning of the wage system which is nearly universal at present. The divisions and subdivisions of labor became so great that it took a large number of workmen to complete a single article. After it was necessary to have buildings and machinery to carry on industry, and as laborers could not furnish these without a system of coöperation, which had not been introduced, they were obliged to rely upon others called capitalists to construct buildings and furnish machinery and raw material, while they accepted a daily

remuneration for their services, called wages, taking no risks of loss and participating in no gains. The rapid development of manufacturing interests with the use of steam and improved machinery, the increased facilities of transportation by means of canals, waterways, and railroads, caused such constant and radical changes in economic life as to be termed an industrial revolution. The large amount of business transactions brought about the credit system, and with it the banking industry. Manufactured products increased enormously, the agricultural area was greatly extended, trade and commerce expanded in extreme proportions, divisions of labor were greatly increased. Facilities for transportation kept up with the general improvement in other lines, while industrial enterprises reached greater and greater magnitudes.

Free Competition.

At this stage of progress another economic phase appears. Under the old guild system prices were regulated largely by custom or by the consent of the guilds. As the guilds had much influence in the government of the cities this method of fixing prices became a law. There was known the just price and the fair price in the market, fixed by custom, or agreement, and finally by legal enactment. On account of the scarcity of labor at certain periods the wages varied to so great an extent that the price of labor in the market was also fixed by custom, agreement, or law.

In the industrial stage these restrictions and barriers were broken down. All tradesmen and manufacturers now compete with their fellows in the market for the sale or purchase of goods, and prices are regulated by free competition. Laborers too seek the highest wages their

services will bring, and wages, instead of being established by custom or law, are now regulated by the law of supply and demand or by market rates. The abuses which crept in through the attempt to regulate wages and prices by law brought forth a great reaction. It was finally urged by economic thinkers that if each man will seek his individual interests he will best promote the common interests and the common good of society, a doctrine true only in part, for the immediate interest of the individual may not always be his ultimate interest and consequently not the ultimate interest of the community. But the famous "laissez-faire" assumption that government should cease to regulate prices or wages by law after it had expanded into the doctrine of non-interference in economic processes, leaving all regulation to free competition, finally prevailed. For many years this was the prevailing doctrine, and indeed the actual practice in England, and became the formal basis of modern political economy. The rapid economic changes occasioned by what is known as the industrial revolution brought great injustice by the irregularities of industry, and in many instances much suffering occurred because people could not adjust themselves to the new conditions caused by these sudden changes. Also, the rapid production of wealth led to its excessive power, created discontent thereby, and finally led to a reaction in favor of restrictive measures. Experience demonstrated to many that the largest conceivable amount of economic freedom was only secured to all by wise restrictive measures. This is as true of economics as of politics; so it was that labor organizations sprang up for the protection of the rights of the laborers; just laws are passed protecting laborers

and capitalists, securing the rights of both, and greater activity on the part of the state in the supervision of industry and in the protection of the industrial and economic interests of its subjects has obtained.

Competition in Groups.

General competition, which began so severely between individuals, finally changed, through the process of shifting industry, into competitive groups which are considered as high-pressure and low-pressure groups. That is, while all wage-earners are competing with one another for position, this competition becomes intense as it is narrowed down to a single industry, and reaches its maximum when several are competing for the same occupation in a given factory. Thus the hands in a cotton mill have a very general competition with the hands in a woolen mill, and much less with the hands of an iron foundry, but the cotton-mill hands are in a sharp competition with one another, and this becomes a high-pressure group when there is a large number of laborers in the cotton industry seeking employment, in comparison with the number of places to be filled; and when a single occupation in the mill is considered, this competition becomes narrow and intense. Thus in the iron factory we find another competing group of laborers, and within this many other smaller separate competitive groups.

The whole effect of the division of labor at first is to render it immobile. Each individual seeking for employment learns to do one thing well, which may be a small part of the manufacture of a single article. If he is thrown out of employment he must seek a place in other competing groups of the same industry. Failing in this, he will seek

other employment in the same groups, and failing in this, he will endeavor to enter other industries, for which he has no skill; consequently he must take a lower position. But failing in all of these, he seeks employment among the great body of unskilled laborers. The secondary effect of the excessive division of labor is to break down the barriers of groups, because the very minuteness of the division makes it possible for the laborer to prepare himself in a short time for the occupation; hence, laborers may more readily pass from one group to another.

The division of labor has become so minute that it takes a man of intelligence but a little while to learn how to polish a boot-heel, or a woman to make a certain portion of a shirt, or of a laborer to attend a bolt-cutting machine. Therefore, while the introduction of the so-called labor-saving machinery has a tendency to disarrange competitive groups and throw laborers out of employment, the minute division of labor allows them to shift more readily from one industry to another.

Organization of Capital.

The introduction of power manufacture has brought about the need of carrying on productive enterprises on a great scale, and this has led to the organization of capital, usually in the form of corporations, for the manufacture of goods, the development of mines, the building of railroads and canals, and the purpose of trade. All this has tended to bring about a momentum in capitalistic production. The absolute necessity for the use of capital, and the fact that capital takes the initiative in all modern manufacturing processes, gives it an immense power in the modern economic life. The momentum of capital in itself

is also great, and it has moved forward with unrelenting selfishness in seeking its own interests. Hence it is not on account of the undue influence of any individual or class of individuals, but on account of economic conditions, that the overweening power of capital exists.

Labor Organizations.

To offset this, laborers have organized themselves into groups to protect their own interests. They seek to meet the monopolistic power of capital with the monopolistic power of labor. While they realize that capital is essential to modern productive processes, they also know that nothing can be done without labor. They claim that capital has received more than its just reward of industry, and to obtain what belongs to labor they must act as a unit; that is, as a monopoly. They propose to raise the rate of wages by forcing employers to comply with their demands, and by shutting out of a given territory all competition of labor. These two facts of capitalistic and labor organizations have brought into the economic life many questions of great importance. Two forces whose interests are essentially the same in the process of production have become suddenly antagonistic on account of supposed discrepancy in distribution. But the combined influence of conscious and unconscious organization has tended to readjust economic conditions of life.

The State and Industry.

The apparent irregularities in the shaping of modern economic society caused by industrial organization has led many people to look to the state as the regulator of all industries, until the relation of private economics to public economics has become one of the great questions of

modern political economy. Fundamentally the state is the protector and regulator of all industrial coöperation in all economic enterprises. At least, its policy must be so directed as to secure the largest amount of economic freedom compatible with economic justice to all groups and classes. To what extent the state must go in industrial management to secure this end is one of the problems of modern economic life. At present the industrial revolution, or more properly the industrial evolution, still goes on with ever-increasing rapidity, slowly changing the aspect of modern economic life. Notwithstanding the tendency to government interference or regulation, the economic life rests to-day essentially upon the exercise of free competition. Industrial activities have been greatly multiplied; industrial life has been greatly extended; wealth has increased in enormous proportions, until the study of economic life and the laws and principles controlling it has become of vital importance.

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CHAPTER II.

THE NATURE AND DEFINITION OF POLITICAL
ECONOMY.**Political Economy Treats of Economic Life.**

Political economy considers the principles and laws of economic life, or, in other words, the principles involved in production, distribution, and consumption of wealth, and in fact all the activities of economic society, in whatever direction they may operate. It has to do especially with wealth, and for this reason is sometimes called the science of wealth, for by this is meant the observation, classification, and logical arrangement of economic phenomena and the principles arising from man's wealth-getting and wealth-using capacities. But it seeks to interpret the phenomena that arise from man's entire economic activity. While the accumulation of wealth may be the primal and logical idea in political economy, it is better to place man in his economic activity in the foreground. He is the central figure in economic life, and the distribution of wealth has become an important phase of political economy. The principle of distribution, too, is one of the most difficult and important of all within the scope of political economy. While the production and distribution of wealth must always be carefully considered, the effect of these processes on economic society must not be neglected.

Political Economy Arises from Concrete Economic Life.

It has been observed that in his attempt to obtain wealth, man has arranged himself in groups or classes. A multitude of industries have been developed which fall into two groups arising from manufacture or production of wealth, and from trade or the exchange of wealth. Production and exchange are dependent somewhat upon the consumption of wealth by individuals, and the various departments of industry are characterized by the distribution of wealth or the amount of the net product which each one receives, whether he be laborer, landlord, capitalist, manager of business, or coöperator. A study of these various relations of man in the economic process has brought to light certain principles which control the production, distribution, exchange, and consumption of economic goods. These principles form the main topic of political economy. They are ascertained through observation of concrete instances of social groups and social activities in the economic life. These principles are abstracted from the concrete, and become an independent body of knowledge or of science called political economy.

Principles Arising from Man's Economic Activity.

What then is the nature of the principles which arise from man's economic activity? Political Economy would consider production not only an effect, but would find out its processes and the principles controlling it. It would seek not only to find the means of production, but the methods of production which yield the highest returns to human effort. It would discuss not only those factors and powers engaged in production, but would find

out the relative importance of each and the service each performs; it would seek also the effect of the actual returns to each factor. In so doing it would find that the attempt of man to satisfy wants has pursued a zigzag course and is followed by the laws of production, exchange, and distribution.

Relation of Man to Wealth-Getting and Wealth-Using.

Seeking to obtain wealth is one of the primal conditions of economic life; seeking to use it is another. It is the relation of man to these two ideas which lays the foundation of political economy. How society obtains wealth and how it uses it are the first principles. These ideas give rise to the multitude of conditions of life, and tend to demonstrate principles which may be formulated.

Wide Range of Economics.

Political economy, although a compact body of laws and principles, touches a wide range of subjects. It treats of the methods of increasing wealth and the distribution of the same among the various classes of producers; of the exchange of economic goods and of their consumption. It treats of capital and interest, labor and wages, of money and its circulation. In its broad scope it embraces exchange, credit, and the principles of taxation. In considering the laws of wages it treats of strikes and combinations. In the consideration of the factors of production it has to do with social organizations and many other economic problems. But in all this it does not consider the technology of wealth-getting.

Technology of Wealth-Getting.

Political economy is interested in the production of coal and iron, but it does not deal with the technical pro-

cess of their manufacture and sale at a profit to the operator. It may tell how a nation grows wealthy, but it will not instruct the individual in the process of the accumulation of goods on his own account. It is interested in the manufacture of goods, but it will not explain to a person the process of cotton manufacture, nor tell how he can make a margin in wheat. It is interested in the wheat product of the country as a source of wealth, but has nothing to do with instruction in the best processes of agriculture. It makes no attempt to say whether a farmer should raise wheat or corn in a given year, or whether the manufacturer should make a certain grade of goods for the market, but it does investigate the laws of supply and demand and the conditions of wealth-getting and wealth-distributing to such an extent that a person studying these principles may have a larger intelligence in the technology of wealth-getting. It does direct the thoughts toward the business world, and present many phases of the economic life with which the business man and the citizen should be familiar.

Creation of Utilities.

The production of wealth consists in the creation of utilities. Anything that is useful in exchange is economic wealth. Man cannot make new material; he can only change the form of that which already exists, making it more adaptable to human needs. The timber of the forest is changed into furniture, buildings, and articles of use, and when thus changed these articles become wealth or economic goods. So too in the production of raw material on the farm, man coöperates with nature, and the substance of the soil and of the air is changed into corn and fruits; under his direction and care, nature

works for him. Whatever is used by man to satisfy human needs is utility, is wealth. But political economy has to deal with those things about which we economize. Things in a state of nature may be beneficial to man as well as essential to his life and existence. That is, they may be so free, like sunshine and water, as not to be considered as wealth. We economize about those things of which we have not enough without the effort of man. It is well also to distinguish between that which is useful merely and that which is beneficial. Many articles of wealth may be greatly desired by people and at the same time may not be beneficial to them nor conducive to the higher welfare. The whole process, then, of the creation of wealth consists in the change of form or in the change of place of goods, or indeed the change in the conditions surrounding wealth, which tend to enhance its value.

Principles and Laws of Political Economy.

Political economy, then, investigates the laws which arise from economic phenomena. It seeks to lay down guiding principles for the better management of public and private wealth. It is not all theory; it is not speculation, but deals with principles and laws and their application. Through practice in wealth-getting people arrange themselves in economic groups representing both the individual and the group in the process of the creation of wealth. These classes had no idea of creating a political economy or establishing laws for their own control, but unconsciously through long practice and habit there grew up certain usages which became the foundation of principles controlling economic life as practiced by men in their relations to each other. These principles lie at the foun-

dation of the practices of nations, in the creation of wealth, or, in production, distribution, and exchange.

Political Economy is a Science.

Political economy is a young science, scarcely a century old, and has all the defects and irregularities of a growing science. But just as chemistry grew out of alchemy, as astronomy came from astrology, and all science from the speculations of ancient philosophers, so a well-developed science of political economy has arisen from irregular economic life and unsystematic economic thought. Its claim to be a science rests in the fact that it is a classified and systematized body of knowledge. It has well-established principles and laws, and it follows scientific methods in its investigations. Phenomena may be observed, facts collected and classified, and laws deduced in political economy as well as in chemistry, botany, geology, and other natural sciences. The laws of political economy might also be considered natural,—natural social, not natural physical laws. They are not the results of human investigations,—they are the results of human activity. The chief difficulty arises from the fact that society constantly changes, while the elements of nature remain constant. Oxygen once discovered is oxygen the world over, wherever found, and always the same. Now the chemist in his experiments will always succeed if the conditions are right. So too will the economist succeed if the conditions are followed; the laws will operate with precision. But the chemist can manipulate the elements of nature at will, the entomologist can dissect a bug, but the economist cannot well experiment upon society, though he may observe and classify its phenomena. But in every

case, with the economist as well as with the chemist, conditions must be fulfilled or the law will not operate. The chemist has this advantage,—that he can change conditions; while the economist must wait for society to change itself.

Again, society is an organism which grows, not as a tree grows, in a passive state, but partly by the law of mind, by the avarice and desires of men who compose society. Therefore the economist looks for deflecting forces in the movement of society, wrought by man's intellect and will; for example, the discovery and use of steam, which changed the whole economic aspect of society. But can economics determine the future by the application of its laws? No more than any other science. Mathematicians studying the heavenly bodies can determine their shapes and motions, demonstrating with exactness their progress through the heavens; but there is regularity in their movements. The movement of society, however, is that of an irregular curve, and while its general course may be determined, its exact movement is difficult to ascertain unless the deflecting forces can be estimated.

Definition of Political Economy.

Political economy has been defined as the science of economic life, or more especially, the science of the phenomena which arise from economic life. It treats of man in his wealth-getting and wealth-using capacity. It involves all the methods and principles of economic activity.

The efforts of man to satisfy wants by securing material objects may be called the economic life, and a systematic treatise of these efforts makes the science of economics. The terms "Political Economy" and "Economics" are

commonly used interchangeably, while in reality there is a growing divergence in their meaning. The former partook more of the nature of philosophy, with possibly some features of art, while the latter has broadened into a science; or as Political Economy has become more scientific and enlarged its scope it has taken on the name Economics. There is more or less contention as to which is the broader term. In this work Economics is considered rather broader, as it might include some items not especially and strictly included in the science. There are many conditions in which the two words may be interchangeable, and others in which it would seem better to make "Economics" the broader term.

Positions Assumed by Adam Smith and His Followers.

Adam Smith placed wealth-getting in the foreground, and considered lightly distribution in its relation to labor. Ricardo, Senior, and others followed him, and shaped English Political Economy after this model. John Stuart Mill, of the school of Ricardo, Cairnes, and Smith, increased the importance of the distribution of wealth. But the great industrial revolution referred to placed man in the foreground, making him the central figure of economic life, so that to-day the distribution of wealth has become one of the most important principles of economics.

Trend of Modern Economics.

Modern economics each year reaches a far different position as it has a tendency to consider man in his entire economic life. It covers a broad field simply because man's economic life has broadened, and the science built from concrete phenomena follows the development of

the phenomena. It has gone so far in the relation of man to wealth that it has considered his well-being. But in all this the principles of Political Economy wrought out on a basis of free competition have changed but little.

Economic Fact and Theory.

Various theories have been propounded about interest, rent, wages, and in fact all the various phases of economic life. These theories are based upon certain principles, or at least upon principles representing a separate body of laws distinct from the theories and recognized by every one. In the modern world we look about us and find a verification of laws and principles and the substance of theory in economic facts.

References: See end of Chapter III.

CHAPTER III.

THE SCOPE AND METHODS OF POLITICAL ECONOMY.

Field of Political Economy.

The study of political economy will follow wherever man leads in the creation of wealth. Yet there are many phases of social and political life which are not in themselves distinctly economic, and which are entirely excluded from the range of economics. Many facts of the economic life may be traced out in effects, on the society at large, which would not be considered within the province of political economy. It begins and ends with wealth. Around wealth cluster all the principles of political economy; though it is not merely the production and distribution of this wealth in itself, but in its relation to man, which yields the highest form of science. Political economy may occupy in part the same field as political science, history, or sociology. But while it looks for its data in these fields and draws from them its principles and laws, its boundary as a science is entirely distinct.

Boundary of the Science is Subjective.

Like all other sciences, the boundary is subjective. In defining the boundary of any science we must find first the principles and the foundation, what end is to be sought, and the logical processes which it follows. Thus botany, biology, and chemistry may be found in the same field, but they are entirely different sciences, with distinct subjective boundaries. The purpose of the science, its method

of using data, and its logical process mark the finer distinctions from other sciences.

Narrow Conception of the Science.

In dealing with political economy there are thousands who advocate its narrow range. They hold that it embraces a few abstract principles and theories arising originally from concrete economic life and becoming the foundations of a deductive science from which certain other laws and principles are deduced, or which applied to the economic life will furnish the principles for its guidance. This narrow conception of political economy will exclude the relation of economic life to ethical standards or to political usage. It would confine political economy to the narrow boundary of abstract thought and theory. Hence it would not attempt any such thing as practical or applied economics.

Liberal Conception.

Others will give to political economy a broader conception, and take in everything that relates to man and economic life. Indeed, many write so freely as to mingle ethics and political economy all the way through their writings, and others confuse political economy with public economy,—thus involving political science and public administration along with the subject of political economy.

Outline of Economics.

It is easy to observe that the subject may be made too narrow by one classification, or too broad by another. A fair outline of economics would insist on a two-fold classification, to include the various parts of the whole subject. First, according to the nature and logic of the subject, we have pure or abstract political economy, which embodies

the principles of the science which have been formed in the process of abstraction from concrete economic life; and second, applied or concrete economics.

The latter is sometimes called practical economics, because it deals with actual economic phenomena; although one part of economics cannot be said to be more practical than another, for the student is never without the theory and principles before him. Applied economics seeks to verify the principles of pure economics by concrete examples; to inquire into the state of modern economic life either through general or special investigations, to determine the best standard of economic life and to consider the possibility of reaching the desired ends. In the consideration of the last phase we enter the realm of ethics and politics. The field of economics would not be entirely covered without the important branch of the history of economic thought. It is only by a consideration of the views of different economists and schools of economy that we really obtain a proper conception of the science. Going hand in hand with this branch is industrial history, which follows in the concrete the material prosperity of nations and states. This branch must not be neglected by the student, for it reveals to him the basis of the science as the history of economic thought shows how the principles of the science have been abstracted and formulated from the concrete economic life.

For the purposes of study it is well to consider the second classification, according economic agencies (1) into private or social economics, and (2) into public or political economics. The former refers to all non-political activities carried on by individuals or by combinations of individuals. It includes nearly

all of modern industry in its manifold departments, and represents the field of operation of the laws of political economy. It is within this department that the laws of production, distribution, and exchange are manifest under free competition. On the other hand, public economics has to do with all of those relations of wealth-getting and wealth-using in which the state exercises a peculiar agency. Carried to its fullest extent, this department of economics touches political science. However, in its consideration only economic principles should be taken into account. Wherever the state operates industry for profit, whether the gain is applied in furnishing a cheaper service to the people or whether it is reserved as a surplus to be applied to some other form of public expenditure, the state acts as an economic agent, and as such performs a political as well as an economic function. It is possible, however, to apply the principles of pure economics to this as well as to other economic agencies, with the probable condition of monopoly in the place of free competition. It is not necessary that there should be any confusion in the treatment of public economics with politics or political science, for separate sciences may deal with the same data for different purposes and in a different way. The boundaries of sciences are subjective, or psychological, and are not limited by concrete phenomena. Hence two or more sciences may overlap one another in the field of operation without destroying their autonomy nor in the least interfering with one another. Thus, take the subject of trusts: having certain data given, the subject may be considered as to (1) economic effects, (2) social effects, or (3) as to political remedies. The first will belong to economics, the second to sociology, and the third to political science, ac-

according to the method of investigation and the purpose of the science. While it is well to consider economics as a complete and compact science, the classification of the different branches will lead to a better formula or plan of study, and will, moreover, reveal more readily the real purposes of the science. The scheme presented, then, is as follows:

ECONOMICS.

A.—Classification according to nature and logic of the science:

- (1) Pure or abstract Political Economy.
 - (a) Laws, principles, and theories.
- (2) Applied economics.
 - (a) Verification of laws and principles in concrete economic life.
 - (b) Practical investigation into economic phenomena, general or special, and classification and deduction of the same.
 - (c) Consideration of ideal standards and the means of approximating them.
- (3) History of economic thought.
- (4) Industrial history.
- (5) Methodology of the science.

B.—Classification according to agencies:

- (1) Private or non-political economics.
- (2) Public or political economics.
 - (a) Public control of industries.
 - (b) Taxation and finance so far as related to economics.

The Pure Science.

Pure science treats of fact, logically stated. The method employed must be deductive and hypothetical, although it is based upon observation. Although the pure political economy represents the fundamental principles of the science and is necessary for the full understanding of economic phenomena, it is inadequate to the solution of practical problems. Although its laws may be of universal application in a general way, they must be applied to suit each particular case. The theory itself excludes time, place and circumstance, and, if it is to be applied, one or more of these must be considered.

It is well, however, for the sake of convenience, to make two great divisions of the subject, allowing the pure science to stand alone as the abstract or rational part, and applied or concrete political economy as a second great division. The former has for its object the mass of social facts as a whole, with a view of discovering their causes and deducing general laws therefrom. It is sometimes called deductive political economy, and is well represented in the old school of economists, of whom Mill and Ricardo are excellent representatives. As it is theoretical, it must apply its principles and rules to the normal man, the typical nation, and normal conditions, if results are to be expected. There are certain principles which are universal in their application in all conditions of society at all times, even though there are constantly changing social conditions. These principles admit of logical arrangement and logical deductions, being based upon human actions and human conditions from which they have been abstracted. They serve in turn as established principles for

the deduction of other principles of economic science. While, primarily, political economy is based upon experience, the real principles have been abstracted and logically stated therefrom. Yet as political economy is a growing science, the economist cannot be a mere theorizer, much less a dreamer. He must be a practical observer.

The economist is frequently called a doctrinaire, or a scholastic dreamer. Perhaps some years ago political economists dwelt more upon theoretical discussion of laws and less upon practical work than at present. Political economy certainly was treated as a theory rather than as a science, but more recently the study has assumed the proportions of a science. Its chief study is the investigation of truth rather than the development of any particular theory. A doctrinaire is one who follows a doctrine, hence a strong partisan is likely to be a doctrinaire; a true scientist cannot well be one. He must follow the truth wherever it leads him, whether it agrees with theory or not. It is hardly the business of the economist to follow the gold doctrine, the free-silver doctrine, free-trade doctrine, tariff doctrine, or fiat-money doctrine, or in fact any other doctrine, as absolute remedies of existing evils. These must all be left for politicians and statesmen. In the search for truth and the presentation of the principles of economic science, the economist must hold to a positive side of principles and rules which form the body of the science; nor must he depart from any of these, unless a shifting of society should so modify them that they could not be accepted in their entirety. When Adam Smith wrote *The Wealth of Nations*, his mind was centered on the economic conditions of the England of his time. He

took England as the typical nation, the Englishman as the typical man, and consequently sought to lay down principles which were universal and that were true for the economic conditions of all nations. Ricardo followed, giving concentration and body to the main principles of economic philosophy; while John Stuart Mill gave even a greater elaboration of general principles. Adam Smith has been called the founder of the deductive method. He also has been called the originator of the historical school of political economy. In fact, nearly every school of economic thinkers draws something from the *Wealth of Nations* to substantiate its position. In truth, while he was a student of actual conditions of society, the principles he formulated were based upon economic fact, and his deductions were so general as to be applied to all conditions of society. While Ricardo, Cairnes, Senior, Mill and others elaborated the deductive side of his economy, Malthus and the German school of Roscher, Hildebrand and Knies have developed the concrete side, which has also led to the development of the historical school of political economy. While every economist must use the principles of the deductive science as a basis of operation, it is only in the realm of concrete economics that we obtain practical results.

Concrete Economics.

It is only by the application of the science to actual life that we verify its laws. By it both premises and conclusions are constantly tested by experience. Indeed, by generalization of facts all these laws are obtained. In either case concrete economics seeks and formulates laws that operate over a given period of time, and given territory or

given social state. As we enter this field of concrete or applied economics there may be several lines of operation. First, we may seek a general verification of the principles of pure economics by applying these to specific cases. In this method examples are sought for illustration of principles. In the second place, we may extend the study to historical experience; and this process becomes one of pure induction. It treats of ideal standards for given questions, and draws its conclusions for the support of the same from the realm of economic history and statistics. It considers not only the nature of economic society and what it ought to be, but also enters the field of ethics. If it passes on to the demonstration of the ways and means of changing the trend of economic life or the enforcement of artificial law controlling economic customs, it enters the field of politics. From the study of political economy there have come two standards; there have developed what are known as the old and new schools, or the deductive and inductive, or the scientific and historical schools. Although these divisions are not identical, they show the general trend of thought: one in its adherence to abstract principles of political economy; the other to the concrete or historical side of economic life.

Practical Economics.

If we consider a third phase of economic study we shall enter by it into practical economics, an important branch of applied economics. In this a particular case, limited in time and condition of society, is considered in regard to its nature, history, justness, and proposed change. Such, for instance, as the city ownership of waterworks in

a given town. It is a case of statistical inquiry and of concrete investigation; therefore it differs from the investigation into pure theory.

The underlying principles of abstract political economy may be brought to bear upon the case to show how far they apply. Indeed, it is impossible to carry on any economic investigation in the field of applied economics without being thoroughly versed in the principles of the science; although in applied economics the solution of the concrete problem is the objective point. This comes as essentially within the scope of the science of political economy as does the abstract theory. Dogmatists have tried to draw hard and fast lines between the pure economics and the applied, discarding either one or the other. Some have gone so far as to consider the principles of political economy to be only the customs and habits of people as portrayed by economic history, thus annihilating the body of the science. But political economy has a service to perform, and the economist will stop short of his duty if he does not point out in the concrete world the actual effect of economic law, ascertaining what ought to be, by which he advances upon pure ethics, and suggest to what extent economic usage could be modified by law.

Problem of Political Economy.

From the foregoing conclusions it may be stated that the great problem of political economy may be included in five leading points as outlined in Prof. Wagner's *Lehrbuch*: 1. The description of economic phenomena; 2. The explanation of the causes upon which they depend; 3. The determination of the standard by which their social merit may be measured; 4. The setting up of an aim for

economic progress; 5. Examination of the ways and means for attaining this end. Thus we see that applied economics has in itself a wide field, and it could not well be ignored. The study of economic phenomena and the arrangement and classification of material must be carried on with as much zeal in economics as in the natural sciences. There should be a scientific method and a scientific spirit, and a desire to know the truth for the truth's sake. This must be either through the investigation of historical fact in connection with the best economic development, or with the statistics of present economic conditions.

Mistakes in Terminology.

In the study of political economy of any kind there are great difficulties to be encountered, and one of the greatest is that it is all clothed in terms common to everyday life. Fallacious reasonings are on this account more frequent in political economy than perhaps in any other science. The phenomena with which it deals are all every-day occurrences and intermingled with the common pursuits of individuals and their material interests. Everybody, therefore, thinks he is a political economist because he sees something of the nature of the material upon which the science operates. But while we may use the terms interest, wealth, wages, capital, and profits in every-day sense, there frequently is a peculiar economic signification attached to each of these terms in the science. Many writers indeed use these terms indiscriminately. As for example, the use of the term "profits," which may be either necessary, temporary, or personal or monopoly profits; or it may be used as gross profits, or net profits. It is difficult to

determine what is meant by the unqualified use of the term "profits." In every instance it is necessary to discriminate very carefully as to the specific meaning in each sense used before an economist can be understood.

Ethics and Economics.

Nearly all writers on political economy have been forced to dispose in one way or another of the subject of ethics. One group of writers have held that ethics has nothing to do with economics whatever; that political economy proper never questions what is right, what is just, or indeed in any sense the duty of man to man. It simply inquires into what actually occurs and what are the principles concerning the occurrence. Another school hold that ethics gives man his chief factor in the economic life; that his duties to his fellows should be considered in every economic action; and so in their writings all the way through we find ethical ideas introduced. Another group would exclude ethics, relegating it to the realm of applied economics.

It certainly can be demonstrated that the pure principles of political economy have nothing to do with ethics. Theories of wages, interest and rent are not questions for ethical consideration, and in the discussion of these theories it appears proper that ethical considerations should be entirely excluded. However, it appears there have been thrust into the economic world ethical considerations. It is impossible to give the full effect of the science without considering the ethical standard. No science has performed its service to humanity until it has been applied to actual life; until it considers the standard and results of right or wrong actions. The justice of certain economic processes is entitled to consideration, but in order that this

ethical consideration shall not interfere with the standard of the pure science, it is well to exclude it entirely from the principles, and make a separate division which shall consider under the head of applied economics the question of what ought to be.

Politics and Economics.

The term "political economy" is somewhat misleading when it is really known that there is very little politics in it according to the modern term. There is a popular notion that political economy means preëminently the discussion of the questions of tariff, free trade, and an advocacy of a national policy of one or the other of these doctrines; or, since the late discussion of the money question, the chief province of political economy is a determination of what kind of currency a nation should use. In the great body of economics, politics has no position whatever. Treating of value and utility, of the laws of supply and demand, of rent and wages, questions of state activity to enforce all these laws may not be considered. However, if it is permissible in applied economics to admit the question of ethics and consider what ought to be the standard of justice in economic production and distribution, it may be permissible to go a step farther, and point out to what extent the state may advance the interests of man by developing a more perfect economic system. Thus ethical politics may be considered in the development of economic science.

Private and Public Economics.

The great body of political economy is called private economics, because it deals with economic life independent of state activities. It refers to the laws and principles

developed by man, individually or in groups, in the wealth-getting or wealth-using process. It has nothing to do with public policy. It is sometimes called social economics as distinct from the policy of states. English writers and most of the German writers on political economy, as well as the Americans, have adhered especially to private economics as distinct from public, while the French writers have interwoven their political economy largely into a public policy of administration. Public economics treats of the relation of state activity to the economic life. It includes the principles of finance and taxation, because these are administered by the government and have certain bearings upon the economic life. Wherever the government has interfered with trade, industry, commerce, labor or wealth, in restricting or advancing its operations, we come in contact with public economics. Hence it appears that no political economy is complete without a consideration of this phase of economic life. Indeed, public economics becomes of late years more and more important.

Sociology and Economics.

By some, political economy is called a branch of sociology. Evidently, political economy is social science because it deals with the relation of men in their associated capacity. But that sociology should be considered the generic term, of which political economy is one of the subjects, is hardly permissible in the present development of sociology. It would be better to insist that political economy has been differentiated from the great body of social sciences, just as political science has been differentiated, and that sociology stands alone as a compact science, one among a group of sister sciences of which political economy

is an important member. Sociology, political economy, and political science may operate in the same concrete field but still be distinct sciences, separated from each other in aims, processes, and conclusions.

Effect of Social Organization.

The effects of social organizations in the economic life are very great. The organization of human society on a religious basis with the central idea of promoting the religious, moral and spiritual interests of mankind, may have a vast influence on the development of economic life, interfering directly with the supply and demand of economic goods, and indeed with the actual practices in the economic world. So, too, every direct social organization that may be established may have a vast influence upon economic conditions. And especially is this true of the great organization called the state. Organized especially for political purposes alone, for the protection of property and the advancement of the general interests of the people at large, it has a vast influence over economic production and distribution, and also in modern times has had much to do with the regulation of distribution. And while it has not entered largely into the process of the economic life or sought to interfere with it to any great extent, certain laws and restrictions have been established which tend to modify the principles of political economy. At least, if it has not interfered with competition directly it has arranged a state by which it proposes to determine the plane of competition, and sets its limitations. This we can observe in the establishment of maximum prices for gas and water, maximum freights and fares, the regulation of the interests of labor or cor-

porations, and other specific points which show to what extent the state has attempted to regulate industry.

Objects Sought in Political Economy.

The chief object sought, then, in political economy as a study, is to determine the principles and laws which control the economic life, to verify these principles by concrete examples, and to carry the study into the investigation of the modern economic life. It should not stop here, but investigate most thoroughly all economic problems, whether theoretical or practical, reaching a final solution in each case. As to the general effects of the study of the science, it ought to create intelligent citizens and statesmen, and prepare all for the position of coöperators in the economic and political life. As a means of discipline there can possibly be no better subject anywhere in the whole university curriculum. It requires scientific thought, close investigation, careful, philosophical reasoning, and excessive power of determination. Possibly there may be to-day somewhat of an indefiniteness to the science, owing to the fact of conflicting opinions respecting its development. But all human life is a science of probabilities, and a study of these questions prepares one more especially for specific living in coöperative society than does that of a study of natural science, which applies less directly to the social wants of man.

Methods of Study.

There are two great methods of the study of political economy. One is to begin with the concrete examples, and approach by degrees the nature of economic society, observing the principles as one passes along. That is, to approach it from the inductive standpoint, gathering facts and mak-

ing generalizations from these facts, applying the laws which have already been demonstrated of specific things.

Another way is to take up the study of the principles of political economy as laid down in the works of the older economists, and master them; and then, to master the various theories that have been advanced from time to time, and having done this to turn the attention to the application of these principles to actual life. To those well matured by years of study there can be no question that the study of the theoretical and abstract principles of political economy should be first, followed by a study of the higher theory and with it the history of economics, and after that a careful investigation of the problems of modern economic life. It would be well to study the principles of taxation as related to economic theory along with the principles of political economy, and to leave public economics in the real sense to the last, in connection with the study of concrete problems.

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BOOK II.

PRODUCTION, DISTRIBUTION, AND CONSUMPTION.

PART I.

FACTORS AND PROCESSES OF PRODUCTION.

CHAPTER I.

THE NATURE OF PRODUCTION.

Unity of the Economic Process.

Production is the greatest fundamental economic process, although in a general way there is unity of all economic processes. The general divisions of production, exchange, distribution and consumption are merely parts of one great life. The divisions have been made chiefly for the purpose of analysis and instruction. Actually, there are no distinct and unchangeable boundaries between these great divisions. The permanence with which they have been held to by economic writers has frequently led young students to wrong impressions of the true nature of underlying processes. A man may be a producer, an exchanger, a transporter, a consumer of goods, while at the same time he is a factor in economic distribution. While this unity of economic process is evinced on all sides, it is nevertheless true that persons specialize along certain lines of work. There are those who are manufacturers of goods; others who are producers of raw material; still others who devote their sole time to the transportation

of goods; and others indeed who are mere exchangers; while each and every one is a representative in the economic process of distribution. It is convenient to recognize the process of the creation of wealth in any form whatever as production, and to characterize every other process of economic life by some special name, as exchange, distribution, etc.

Character of Production.

As before stated, production consists in the creation of utilities, or indeed in the creation of economic goods or wealth. It consists in the transforming of raw materials into forms of utility and beauty for the satisfaction of human wants. Primarily it is the application of labor to what is termed nature, to make it yield a service to mankind. By nature is meant all those physical forces which can be used for the service of man and all those climatic and physical conditions which modify his environment. First of all we have land, which yields through its fertility vegetable foods to support the life of man and beast. It also yields mineral products from underneath the soil. In this connection, too, we have water, which yields the service of sustaining life, enables us to transport goods from one place to another, and yields a force with which to propel machines. We have another form of nature, which is also used as a propelling force, primarily,—the muscular strength of animals which have been domesticated for man's service. And finally, through man's inventive genius we have the use of steam and electricity, two of the greatest forces of nature.

We have also inorganic substances, the components of the earth's crust, which are included in what we call raw

material. Building-stones, clay, chalk, salt, coal and petroleum and other sources of wealth, when once converted into useful products, make up a large proportion of the wealth of the community.

We have also organic substances, which are found in the forest already produced by nature in plants and vegetables of every variety, which are made available by the process of labor. The whole work of production consists only of changing the place or the form of material. Man has always brought to his aid through his inventive genius, tools and machines to supplement his lack of muscular force. Beginning with muscular force, he has domesticated the animals and added their service to his own limited ability. He has harnessed the winds and the water, and thus increased the active forces. He has utilized the expansive power of steam and other vapors and gases; he has utilized the principles of heat and electricity, and thus added to his own great productive power. How far he will continue in the increase of his power of production, yet remains to be seen. Whether or not atmosphere, heat, and ether may not yet be added to electricity and steam in different forms, and these, accompanied with man's inventive genius in the creation of machines and tools, will add to the power of production until again it shall be increased one hundred fold, remains to be seen.

Creation of Wealth.

In an economic sense, wealth includes all those useful articles which supply the wants of man. It matters not whether they may be always beneficial in this use, or not. If they satisfy some known wants, though in the long run their effect may be deleterious, the articles assume the

form of economic goods, and are called wealth. A discrimination should be made at once between the common signification of the term wealth, meaning the relative amount of property which a man owns, and the economic use of the term wealth. In the latter sense it means any form of economic goods or utilities, such as tools, articles of apparel, buildings, food, ornaments, or anything which satisfies the wants of man. The man who owns the shovel with which he labors is wealthy in the economic sense, to the amount of the shovel, just as the man who owns great machines and buildings and tools and railroads is wealthy to that extent.

The sum total of the wealth of a community is found by an estimate of the net private wealth of individuals plus the net public wealth of the nation. Sometimes those articles which are classified as personal or private wealth may be nothing more than an evidence of an indebtedness which must be accounted for in the inventory of the wealth of each and every person. Thus, a mortgage may be considered as the private wealth of an individual, but in the estimation of the private wealth of another individual, upon whose property the mortgage is made, it must be considered as an evidence of indebtedness. Thus the person who holds a government bond may be considered wealthy to that extent, but in the estimate of national wealth the same government bond must be entered as evidence of indebtedness.

The creation of wealth has increased rapidly within recent years, for its process is necessarily cumulative. Each year adds new processes of labor, new kinds of machinery, and new methods of development. Each

year adds a large amount of capital engaged in productive processes, which adds momentum to wealth-producing and increases in geometrical ratio the power of wealth.

Who Are Producers?

It is a popular opinion that those persons who are transforming raw materials into the finished product and those who are engaged in the production of agricultural and mineral products through the aid of nature are all producers and all others non-producers. According to this notion the capitalist, the merchant, the banker, the lawyer, the minister, are all classed in the great group of non-producers. The Physiocrats estimated the productivity of toil by the proportion of useful raw materials secured, as in farming, stock-raising, mining, lumbering, and so forth, and they stigmatized all other occupations as barren because they were sustained by the surplus products of the land. Prior to them the mercantilists considered all industry as productive only in proportion as it tended to enlarge the nation's stock of money. Adam Smith and John Stuart Mill called all exertion, however useful it might be, which does not take the form of creating some useful material object or fixing and realizing itself in such object, unproductive. It has been the tendency of English economists to follow Smith and Mill, while the French school of philosophers have held to the doctrine that all labor is productive that imparts economic modifications to material nature, by man. Some of the German writers go even farther than this, and define every form of labor as productive which society is willing to pay for; as Roscher states it, "Every service which is rationally sought, and duly paid for, is productive."

All members of society who are performing a service which has exchangeable value, or creating exchangeable goods, may be called producers. It is quite the popular error these days to suppose that farmers, for instance, are more a producing class than merchants, bankers, manufacturers, or transporters of goods. The farmer, it is true, produces food for the merchant, but the merchant exchanges clothes for the goods. If it were not for the merchant the farmer would be obliged to leave his work and obtain his clothes from the clothier personally. Or if it were not for the manufacturer he would be obliged to do as he did in the olden time, allow his wife to manufacture it for him. Also, the farmer would manufacture his own tools, and it would occupy much time which could be used more advantageously in the tilling of the soil. It is simply a question of the division of labor, in which the farmer says, "I will raise the wheat and exchange it for clothing, implements, furniture, flour; and all the food that I need, which does not grow upon my land." Possibly the farmer has it within his power, if he chooses, to become independent to a greater extent than any other individual, for in a meager way he is the source of all production. Nevertheless, without turning civilization back upon itself he must remain dependent upon others, who coöperate with him in the process of production.

Nature of Wealth.

Wealth consists of the utilities in the form of economic goods which are formed by shaping, combining or placing the various elements of nature. This wealth has sometimes been classified as material and immaterial. According to this classification, material wealth includes

tangible goods that may be exchanged in the market; immaterial wealth refers to forces and conditions, such as superior skill, talent, or endowment, good-will in business, and certain forms of credit. It appears that it is better to discriminate very carefully between wealth and the individual; that is, between wealth and the conditions of wealth. If wealth consists in the well-being of man in his relation to material goods, it is necessary in political economy to understand that wealth is "objective to the user, material, useful and exchangeable." These are the four essential characteristics of wealth. Wealth, too, is material, because those things which are immaterial cannot be well measured, and wealth can be. Only those things which are said to be useful and exchangeable can be said to be wealth, and by useful we mean things that are used, not necessarily things that are beneficial. It is sometimes said that people sell the good-will of a business, and therefore that the good-will of a business should be considered immaterial wealth. A careful analysis shows that you sell a business at a higher premium on account of its locality, and these excessive bonuses paid are really in the nature of rent paid for a permanent monopoly. It is also asserted that when Patti gives one of her magnificent renditions, her song is exchangeable wealth. It would be better to regard Patti as an individual endowed by nature and developed by training to such an extent that she yields a superior service to mankind, which is regularly sought and duly paid for as a service, and not as wealth. The extra sum paid for this superior service is in the nature of rent of native and acquired talent and qualities.

Various Methods of Creating Wealth.

Material wealth is generally produced (1) by spontaneous products of nature, such as forests, mineral springs, and favorable localities; (2) by digging products from the mines; (3) by the growth of vegetable and animal products obtained by working in harmony with nature's forces; (4) by transporting things from place to place; (5) by changing the forms of things; and finally, (6) by exchanging them between different owners. Outside of these specific processes of obtaining material wealth, social organization and social improvement are conditions which enhance all of these necessary forms.

It is evident that the process of coloring by dye-stuffs, or that of soap-making, may be good illustrations of the chemical production of wealth. Everything pertaining to the making of clothes is an illustration of the mechanical processes of production. It is not difficult to see why the transportation of goods from place to place increases the value of wealth. As an example of this, Mr. Roscher refers to the ice trade between Boston and the West Indies. For example, it costs \$2.25 to pack ice in the ship at Boston, but when brought to its destination in the West Indies it sells for \$65 a ton simply because its want-satisfying power in the West Indies is much greater than its want-satisfying power at Boston, where its supply is unlimited. There is then no difficulty in understanding how it is that the exchange of goods increases wealth. Suppose a collector owns a good farm horse and a farmer a good carriage horse. The farm horse, not being a good roadster, is of little value to the collector, while the carriage horse is of little service at the plow and of little

value to the farmer in any other way. By an even exchange of horses each would be benefited by the operation. This disproves the old theory that if two men trade horses one at least must be beaten by the operation. This principle has been further illustrated by the example of three persons, each tied to a stake, without communication: one having clothing and no food or fire, another having only food without clothing or fire, the third having fire without clothing or food. As it is, each one will perish for the lack of the surplus goods which the others have. Could they get together and exchange their surplus products, all might live. This principle is vital in settling the questions of international exchange, trade, and tariffs.

Different Ways of Creating Value.

The amount of wealth an article contains is termed its value, which represents the power an article has to exchange for other articles. There are various ways of creating this value, although it arises largely from the desirability of an article, and can always be traced to its subjective condition. The value of an article may be enhanced frequently on account of time. Thus, to keep apples from the autumn into the winter will increase their value, just as keeping ice from winter to summer will enhance its value. Also, the transporting of commodities from one place to another will increase their value. Thus, corn which is of little value in Kansas, may be of greater value in Chicago, still greater in New York, and greater in England, simply because of transportation. But the greatest method of developing value is by changing the form of articles. The timber of the forest

may be of little value until transformed into wagons or furniture, when its value may be increased one hundred fold. Cotton in its raw state has a certain value, but when changed into a fine garment through various processes its value is greatly enhanced. The best illustrations of the various kinds of value may be seen in the transformation of iron ore into various articles. Thus, the ore at the mouth of the mine is possessed of a certain value, but when it is transported to the smelter its value increases because of the change of place. When passed through the smelter it is changed into pig-iron, and its value is greater than before. If the pig-iron is transported to steel works its value is increased again, and increased still again when transformed into steel. If the same steel is developed into a sewing-machine, a bicycle, or a watch spring, its value is enhanced very many times. The value of manufactured articles may be greatly increased by storage until the demand for them is increased.

We shall find, then, that in the production of wealth to change the form or place of an article may increase its value, and that the value is represented always in the power of exchange. It is the relative term always accompanying the utility of an article which represents its want-satisfying power. But this takes us back again to the proposition that all persons engaged in these various processes are producers, and all those who are aiding directly or indirectly the persons engaged in these specific processes may also be classified as producers.

Various Processes of Production.

If we inquire, however, into the essential elements of production, and try to estimate what factors are most

largely engaged in the process, we shall find that land, or nature, labor, capital and social organization are the great factors of production. Not that nature in itself is a producer of wealth without the process of labor or human exertion, but it occupies such an essential position in the process of production that it is considered a factor. These are all working in combination in the creation of wealth. While capital at first was not a primary factor, it has become essential to modern economic processes.

Essential Factors of Production.

The two essential factors of production are land (or nature) and labor. Without these there can be no artificial production of wealth. By land we mean not only the earth in its fertility and wealth of vegetable and animal life, but the water-power, and indeed all the permanent forces of nature which may be used and turned to man's service. It is only by the application of labor to these that wealth or economic goods are produced. In the beginning labor takes the initiative by transforming the products of nature into useful articles, such as bows and arrows and implements, or into boats, canoes, and household utensils. Again, it creates clothing, and houses,—all from the raw products of nature. These productions are called wealth, in the creation of which labor has been the constant factor from the beginning.

Conditions of Wealth-Producing.

If man through labor has developed certain wealth, and this again is turned to aid in the production of other wealth or economic goods, such wealth set apart to be used in the production of economic goods is called capital. In the modern economic life there is no produc-

tion of any great extent possible without capital. Though labor logically preceded, capital usually takes the initiative in production. The process is as follows: first, labor produced certain portions of wealth; then this wealth was used along with labor to create other wealth. As wealth increased, capital became more prominent, and it employed more laborers in the obtaining of raw material and in the manufacture of useful articles from this raw material. In some enterprises we find a large amount of capital and a small amount of labor necessary for production, while in others the process is the reverse, and we find a large amount of labor to a small amount of capital. But in every instance, before production is entered upon capital takes the initiative. It constructs the buildings, it furnishes the machinery and raw material, and gives labor an opportunity to earn its own wages. Thus labor is limited in its efforts by the amount of capital in use.

The other non-essential condition of wealth-producing is social organization. It is sometimes said that the state is a partner with the individual in the process of production. This is rather a strong and fanciful expression, although it must be conceded that without social organization modern business enterprises would be futile. The organization of society protects property and guarantees the rights of each individual to the products of wealth. More than this, when society at large deepens a harbor or widens a river, builds a canal or railroad, or furnishes means for the better development of agriculture, manufactures, exchange, trade, or commerce in any way, it is performing a great service in the advancement of production. Therefore modern productive enterprises are not

only not possible without social organization, but the effect of social organization is to advance them at a rapid rate.

Means of Increasing Production.

One of the best methods of increasing production is through superior business management, and this has developed a distinct class of people, and indeed a distinct vocation, in production. It might be well to suggest the ordinary fifth factor in production as managing ability, for indeed without this, modern business enterprises could not be carried on. The *entrepreneur* or business manager furnishes the brain-power that keeps industry intact. He assumes the risk and responsibility of business, undertakes business enterprises, paying for capital, labor and land as he has need. But while he has the responsibility of loss he has the right of gain. Outside of a sound and industrious body of laborers, other things being equal, no other factor is of greater importance than the managing ability of the business men who undertake the great enterprises of industrial life.

There are other means of enhancing production, by having a better quality of labor, and better relations between those furnishing the capital, the labor, or land, and the managing ability. Harmonious activity of all factors enhances production. Also, it may be stated that certain things which have arisen out of the necessity of economic progress from time to time represent some of the most wholesome conditions of production. Among these are the divisions of labor which enable men to produce more in the same time with less energy: the introduction of so-called labor-saving machinery, which combines with man's service as the result of his inventive

genius; and the credit system, which enables the rapid exchange of goods, rapid transportation facilities, the fertile soil and excellent climatic influences, all of which tend to modify and intensify the processes of production.

References: Walker, Political Economy; Gunton, Wealth and Progress; Roscher, Political Economy; Marshall, Economics of Industry.

CHAPTER II.

LAND AS A FACTOR IN PRODUCTION.

Land or Nature the First Consideration.

Man derives directly or indirectly all his sustenance from the soil and from the elements of nature. From the soil he receives vegetable and animal products. From the water he receives power to turn machinery and means of transportation. The winds furnish him means of propelling machinery and mills, and carrying on commerce. The forests yield him timber; the mines yield him coal, salt, iron, precious metals, and many other products. The sunshine pours a flood of light and a volume of heat upon the earth, and quickens everything with life. It is from nature that man receives the conditions that allow life and the means which perpetuate it. It is through labor, in the mastery of these forms, forces and elements of nature, that man supports life and advances his material welfare.

Bounties of Nature.

Nature is everywhere bountiful so long as labor forces her to yield her treasures. Economic writers have spoken of the niggardliness of nature, and how through excessive toil only could man receive his support. They have pictured all of the difficulties of economic life as appearing directly on account of the niggardliness of nature in withholding her bounties from man. Other writers have tried to show that nature is bountiful, and that all wealth comes from it.

The bountifulness of nature varies in many ways on account of different climate and soil. In one territory the soil is fertile, and with a small amount of cultivation responds readily to the labor of man; in another place the soil is poor, and with his utmost attention it yields but a meager crop. In the tropical climates food grows already prepared, while in the colder climates the soil must be thoroughly tilled to yield a crop. Within the tropics very little clothing or shelter is needed for protection, in the temperate climate substantial houses and abundant clothing are necessary, while in the extreme cold regions man's whole time is occupied in obtaining sufficient animal food to keep him alive and clothing to preserve him from the rigors of the climate. Standing alone, nature appears hard, cruel and niggardly, but with labor applied she is made to yield a rich store of treasure. By labor, food is accumulated in abundance, clothing comes without stint, and houses and palaces arise for the protection of man. By labor, the refinements of art and education are made possible. It is true, that at times nature appears fickle, for drought may spoil the crops, storms may devastate them, buildings may be destroyed by the ravages of fire and wind, and men may perish through starvation or the fatal pestilence. Yet it may be stated that upon the whole, nature yields her bounties to man in proportion to well-directed labor.

Offices of Land.

Land is essential, directly or indirectly, to all economic processes. Primarily, it is the great factor in production. It gives us standing-room, without which nothing can be accomplished; for location, or position, is essential to life.

In a scientific way the principle of location has a vast deal to do with economic life and economic theory. Again, by fertility it yields vegetable products for man and beast for the purpose of sustaining life and for use in the arts and industries, and finally from underneath the surface it yields the rich mineral products, salt, iron, tin, copper and zinc, so much used in the economic arts, and gold and silver, desired for their services as money and in the ornamental arts. With these three uses of land man spends the greater part of his life in making a combination of forces or materials in the creation of forms of wealth.

Civilization and the Land Question.

In the economy of human existence the influence of a fertile soil cannot be overestimated. The ancient civilization of Babylon, the arts and industries of Egypt, the philosophy and learning of Greece, depended upon a fertile soil. So great has been the influence of the land question among the nations of the world that if one were to write the history of land tenure he would have formed, in general, a correct estimate of the primary cause of the rise and development of national life. In our own nation the effect of a large fertile agricultural area is frequently overlooked by economic philosophers. Our broad valleys and our fertile soil brought immigrants from the Old World to seek homes in the new land; our abundant mineral resources found in the heart of the mountains brought miners from the Old World to dig and delve for treasures here and develop a great population. It is the immense yield of these agricultural and mineral products that supplies the millions who run the factories, the looms, and the shops of our own country, and furnishes the surplus to

feed the nations of the Old World, for which we receive an ample return in a variety of imported products.

Population and Land.

With the growth of population the supply of labor is constantly increased, and it is limited by the amount of available food-supply or subsistence. Fearing that the growth of population might gradually outrun the means of subsistence, an English economist named Malthus advanced a theory of population as follows: he held that population tended to increase in a geometrical progression, while the food-supply under most favorable circumstances could not be made to increase more rapidly than in arithmetical progression. Hence if there was no check to the natural increase of population there would soon be more people than the land could support, and thousands would die of starvation. But there are sufficient checks in the growth of population to allay all fears on the subject. The first group are called the positive checks, by which population is kept down by means of war, pestilence, plagues, intemperance, vice, and crime. Thousands thus perish from the face of the earth every year. The preventive checks are those of character and prudence, by means of which, as population becomes denser, marriages are postponed and the number of births lessened. Also, through self-control families become smaller each succeeding year, and a check occurs on increasing density of population. The result is, that population practically does not increase in a geometrical ratio. Again, through modern invention and skill land is made to yield a larger return for the support of life. Thus, by intensive agriculture an acre of land will yield a larger support of life than ever

before. By the modern art of cooking and preparing food a quantity of food has nearly doubled its power to support life. So that there has always been land enough, and so far as we can see for hundreds of years to come there will be sufficient land to support the population. Some of the instances of the rapid increase of population would seem, however, to be a subject for thoughtfulness, at least. If population should increase in the United States in the future as it has done in the past, it is only a matter of time when there will not be sufficient standing-room for the people. If our population continues to double every twenty-five years as it has done in the past, in 1925 we shall have 150,000,000 people; in 1950, 300,000,000; in the year 2000 we should have 1,200,000,000 people; and it would not be long before we should have in the United States more than the entire population of the globe at the present time. But the checks have already set in, both to immigration and to birth, and such a calamity is not likely to occur. Mr. Marshall points out that if there are only two people on the face of the earth, and that if population doubles once in fifty years, at the expiration of 3000 years the whole surface of the earth, land and sea would be covered with people 300 deep. The significance of these subjects is seen when the relation of land to population is considered, for the development of wealth is changed to a great extent by a rapid increase.

Laws of Income from Agriculture.

Industries are divided for convenience into those of increasing returns, decreasing returns, and equal returns. By this is meant in the first instance, that if a certain amount of labor and capital yields a certain income, double

the amount of capital will yield more than double the income; and in the second case, that if a certain amount of labor and capital yields a certain income, double the amount of capital and labor will yield less than double the income. In the third case, it is assumed that income will be increased in proportion to the amount of increase of labor and capital. Agriculture is generally considered an industry of decreasing returns. But it is necessary to consider specifically what is meant by this assertion. Usually when this statement is made, it is understood to apply to a limited portion of land. Thus, if a given farm is taken of a thousand acres, a certain number of laborers with sufficient capital applied to work the farm will give a certain income. If double the number of laborers crowd into this same area, with a proportional increase of capital, and the limit of production is not reached, they may greatly increase the product. Hence, increased amounts of labor and capital may be continually applied to this tract of land with a gradual increase in the returns or product; but this will be entirely disproportionate to the labor and capital expended. It may be more clearly illustrated in this way: To plow the land once it will yield a certain crop; to plow it a second time will certainly increase the crop, but will not double the product. To plow it a third time will probably increase the product slightly, so that there is not proportionate return to the amount of capital and labor invested. Yet when we consider agriculture as a whole, it will be found, if a long period be considered, that it is an industry of increasing returns. The invention of new machinery, new methods and appliances, and the increased utility of food, as above

stated, yield a larger return in proportion to the number of persons engaged each succeeding year. In the consideration of this principle, all accidents of drought and years of agricultural depression must be excluded as abnormal.

In the case of manufactures, however, which are generally classified as industries of proportionate returns, it will be found that they also increase their returns from year to year in proportion to the number of persons engaged, more rapidly than does agriculture. However, if taken in a limited sense in a particular field, owing to competition, it will be found that manufactures decrease in returns the same as agriculture in a limited field. Where special monopolies exist, such as railroads, telegraph lines, and water-power, the industries are usually those of increasing returns, as they yield an income in a proportion greater than the increased application of capital and labor.

Limited Returns.

In agriculture, when a given territory is considered, the law should be given as one of limited returns. That is, in the cultivation of a given tract of land a point is soon reached at which no additional application of labor or capital will cause the soil to yield any increased product. In many of the industries outside of agriculture the same principle of limited returns is to be observed, in a lesser degree. The law of competition which reduces the market price to the cost of production, limits what may be done and what may not be done to develop an income.

Extension of Territory.

The opening up of new lands to modern civilization presents the relation of land to income in its clearest light.

When Columbus first landed in America a few thousand Indians were roaming over a vast territory. They felt that there was not sufficient room for them to obtain a living, so they fought with each other for territory. To-day 75,000,000 of people occupy the same territory within the present boundary of the United States, and still, with the exception of a few congested districts, there is abundance of room. When the barbarians swept down over Europe and invaded the Roman empire, it was to find a larger area of land. Although few in number, their mode of living made the country insufficient for their needs, and made them discontented with their lot. Thus, rather than seek different methods of intensive agriculture or larger use of the land, they simply sought new lands, hoping to retain their old mode of life. Had they changed their civilization by introducing intensive agriculture, the utility of land would have been so greatly increased as to have supported a larger population without the necessity of migration.

Land Area.

Within recent years large amounts of fertile land have been brought into use in the United States, which has yielded a large increase in the returns of the quantity of the products. As the demand for every agricultural product shows a diminishing scale of utility, and as the value of the whole product is determined by the marginal utility represented by the last unsatisfied want, it appears that if the scale of demand remains constant there will be a diminished value of the total product; and this means that a point will be inevitably reached where receipts will fall below costs, even though costs themselves are also diminishing. We have had ample illustration of this

from Western farming in the years from 1889-1897. For the cost of agriculture has been decreasing all the time, while the value of the product has decreased more rapidly than the cost; hence the price of a commodity in the market has frequently been reduced below the cost of production. Thus a relatively decreasing number of agriculturists have provided food for themselves, for the whole nation at large, as well as for foreign markets. If we refer to quantity, it appears that agriculture taken as a whole, considered in the light of modern industrial methods, through a period of a century, is yielding more to-day in proportion to the capital expended upon it than ever before. It is estimated that in England during the last six hundred years the product per acre of staple crops has increased ten fold. But this, strictly speaking, must refer to the quantity of the product rather than to its value.

Transportation and Agriculture.

One of the greatest effects to be considered in relation to the productivity of the soil in the United States is that of transportation. Cheap transportation has a tendency to enlarge the agricultural areas and bring distant fertile lands into the market. For this reason the people have abandoned the farms of the East and have taken up lands in the fertile valleys of the far West, distant from the markets; yet the fertility of the soil is so great that the yield is sufficient to pay the transportation to market and leave an income greater than that of the inferior lands of the East, situated close to the markets. Indeed, the influence of the fertile lands of the Mississippi valley has caused the abandonment not only of the poorer lands of

New England, but even those of Scotland and England and other regions of the Old World, which have been forsaken for the fertile lands of the New World. Everywhere we shall observe the shifting of the population, rushing toward new and fertile lands, or receding as they are deceived by the process. This change has a vast deal to do with the doctrine of rent.

Policy of the United States.

Nations have had different policies for the disposal of agricultural lands. The United States by its laws of 1787 adopted a policy which had hitherto been unknown in the practices of nations in dealing with their public domain. This policy made it possible for everyone who desired, to obtain a hundred and sixty acres of land at a minimum price. This was deemed the wisest and best disposition of the land; although it did not always work well in practice, for the intention of the law has frequently been thwarted by individuals, who, by fair means or foul, have grasped large tracts of land, increasing their holdings in some instances to territories equal to principalities. However, in this connection, it may be stated that from 1870 to 1880 the average size of farms gradually diminished, and from 1880 to 1890 there was only a slight increase in the average.* On the one hand, large farms were being divided into smaller tracts; and on the other, small holdings were absorbed by the larger. Thus, while a large number of vast holdings have been created, outside of these the average size of the farm is diminishing. As to the advantages of large or small holdings, Mr. Walker asserts that variety of farms is best for the benefit of agriculture. He holds that it is a good plan to have some great farms

* The average size of farms has continued to diminish to the present time, 1906.

upon which the most improved machinery shall be used and the most modern scientific processes of agriculture practiced, in order to furnish a stimulus to improved methods. He further asserts that the medium-sized holdings, which give character to our great farming communities and enable men of moderate means to engage in the agricultural business, are beneficial to a great republic in which the people are endowed with the right of self-government. He further demonstrates that small holdings should be available, so that those who desire to quit the ranks of the wage-earning class may own a small parcel of land, and thus have their own homes and carry on their own business independently. This variety of landholding corresponds to the variety of life which is necessary to the stability and prosperity of a government by the people.

Monopoly in Land.

Many fear that the absorption of small holdings into great baronial estates will continue until a monopoly of lands shall obtain, and landlordism shall prevail in the United States as in the Old World. In England and Scotland the land to-day is owned by a very few people, owing, in part, to the laws of primogeniture and entail. France, on the contrary, through the influence of an ancient law, insists that the estates must be divided among the heirs, and the practice of very small holdings has obtained there. According to the census of 1890, sixty-five per cent. of all the farms in the United States were owned by the occupants.* This would show that landlordism or the rental system is gradually increasing in the United States. However, the farms are still small and the tendency to subdivision is great. What the future will bring

* Tenant farming has increased since 1890.

forth is difficult to see. Repeated periods of agricultural depression may lead to the union of agricultural interests and the management of farming on a large scale, after the plan of a great department store or a modern "trust." When a person obtains a tract of land which is peculiarly desirable, to a certain extent he obtains a monopoly over that particular piece of property. But so long as there are other tracts more or less desirable, this monopoly can never be perfect; and so long as he must compete in the market for the sale of agricultural products, it is impossible for him to fix a monopoly price on his goods. Considered as a whole, then, land is not a monopoly, unless it could all be owned and managed by a given individual or combination of individuals. Nevertheless, owing to the fact of the difference in fertility of soil and desirability of location, a monopoly of land arises in the form of rent, independent, to a certain extent, of the fact that the individual producer cannot fix a monopoly price and therefore obtain monopoly profits from his agricultural produce.

Agricultural Area in the United States.

Notwithstanding the fact that the city population has increased to an enormous extent, the agricultural area in the United States has increased more rapidly in proportion. In 1790 there was about three per cent. of the total population in cities; in 1890 there was about thirty per cent. But the area of cultivation, including irrigated land, amounted in 1890 to about 357,616,755 acres; * while there were left five hundred millions of acres of desert and grazing lands, seventy millions of coal lands, and eighty millions of timber, and probably one million square

* In 1900 total area of farms 841,201,546 acres, of which 414,793,191 acres were improved.

miles of the territory still unsettled. The total amount taken up by farms was 623,218,619 acres. The enormous extent of agricultural area enables the country to support its agricultural population, its immense city population, and to furnish a large proportion of the breadstuffs of Europe.

The aggregate number of families in the United States in 1890 was 12,690,152, of which 4,767,179 were farm families; the remainder, of 7,922,973, were home families. By home families is meant those representing habitations in cities and towns. Of these farm families, 3,142,746 owned their homes, and 1,624,443 were tenants. Of those persons owning their homes, 2,255,789 were free from incumbrances and 886,957 had more or less incumbrances. That is, the farm-owning population represented 65.92 per cent. of the whole, renters or tenants 34.08 per cent.; and of the total number of farms owned, 47.32 per cent. were free from incumbrance and 18.60 had incumbrances.

This is far better than the showing of the city population; for of these 32.98 per cent. owned their homes, 21 per cent. of them being free from incumbrances, and 11.98 per cent. having incumbrances, while 67.2 per cent. were tenants.

In Kansas there are 57.56 per cent. of farm families in proportion to 42.44 of home families. In Iowa 52.88 per cent. are farm families, with 47.12 per cent. of home families. The largest proportion of farm families in any State in the United States is found in North Dakota, with 73.35 per cent.; South Dakota, with 70.52 per cent.; Oklahoma, 69.33 per cent.; Mississippi, 66.80 per cent.;

and Texas, 60.49 per cent. The smallest is Massachusetts, with 7.21 per cent. of farm families and 92.79 per cent. of home families. Much of the farming land occupied to-day has not been cultivated to its fullest extent, but as intensive agriculture is employed the productivity of the soil will be greatly increased.

Variety of Agricultural Products.

The United States has a wide variety of products, on account of its temperature and semi-tropical territory. In this wide extent, from the cereals of the North to the tropical products of the South, we find a great variety of fruits and grains.

As demand for variety of foods has increased, there has been a marked tendency to develop diversity in agriculture. Instead of sections devoting themselves entirely to wheat, to corn, or to fruits, there is a tendency to raise all of these to meet the irregular demands for products. Nevertheless, corn predominates in such States as Nebraska, Kansas, Iowa, and Illinois, while wheat predominates in Minnesota, Wisconsin, Ohio, and the Dakotas. In many sections of California where formerly wheat was almost the only crop, now fruit predominates, with a variety of other productions. The farmer is slowly learning that, because of the uncertainty of climate, and the variation in demand on account of the irregular foreign production, he should vary his crops, so far as the soil and climate will permit, to insure a successful return on part of the land, if not on all. This has the additional advantage of utilizing the varieties of soil that exist even on the same farm, while the alternation of crops on the same soil is necessary in many instances to preserve the land from

exhaustion. In considering economic conditions, scientific agriculture has done much to increase the productive yield of land.

Stock-raising has continued in general throughout the United States. While an enormous stock production is still found on the grazing-lands of the West, still, a larger value of stock production is found on the smaller farms and special stock farms. When each farmer has a few pigs, sheep, cattle, horses, and considerable poultry, for the market, the returns in the aggregate are immense from these sources. Stock-raising has become one of the most productive and certain occupations of the farm.

Economic Effect of Machinery.

The process of farming has been almost entirely transformed by the introduction of devices and machines for the cultivation of the soil. The small farms of the Atlantic seaboard were rough, and in the early period full of stones, sticks, and stumps of timber. It was necessary to conduct farming by hand, or with small tools or machines, but the opening of the wide expanse of prairie land of the Mississippi valley enabled farmers to introduce machinery for plowing, sowing, and harvesting, that are marvels to one not accustomed to their use. The economic effect is to lessen the cost of production. That is, one man can now accomplish as much with machinery as twenty men could formerly without. The whole population of the United States, with the old-fashioned machinery, could not produce what is now produced by a third of the population, with modern machinery. One economic effect of this introduction of machinery is that a smaller population is being used in the production of

raw material in proportion to that employed in making the finished product. Hence a proportionately smaller return to farm labor than to that of manufacturing labor.

While the decrease in the cost of production is evident, an enormous loss has been suffered on account of the rapid changes of machinery. As in manufacturing, the farmer who succeeds must keep up with the latest improvements or the cost of production will be greater than the price of his product in the market. Therefore the whole farming country is strewn with out-of-date machinery, which must of necessity be a great economic loss.

Again, the lack of economy of consumption has also created a great loss. The old-fashioned farmer might lose a spade, or a hoe, or a plow, by carelessness and exposure to the weather, and the loss would not be considerable. But sun and storm and wind will destroy the modern complicated farm machinery, which represents an outlay of hundreds of dollars, more readily than it would destroy the old-fashioned instruments. Therefore to the farmer it is of prime importance that he economize the use of his machinery if he wishes a margin in farming.

We may almost say that the agriculturist is a manufacturer of products, the same as any other manufacturer. It is true, he has the land upon which to labor, and so does every other producer, to a certain extent. He receives his assistance from nature in the fertility of the soil, though the miller may receive his from the water-power, and the manufacturer from mere occupation of the land. Hence, successful farming lies more and more in understanding the nature and preservation of soils

and the adaptability of crops to them, a study of the best machinery, its care and use, and a careful study of the markets, to know what to produce and when to market it at a given price.

Corporate Farming.

Scientific methods have been used on very many large farms, and while small farming has usually been more profitable, because more largely introduced, it still remains true that a large farm, properly managed, can produce more cheaply than a series of small farms. For each of the small farms must have its own set of machinery, its buildings, its special management, etc. Here, as elsewhere in all industry, combination, if there is sufficient brain-power exercised in organization, will enable a cheaper production. Just as the department store may sell goods at a lower rate, and make a profit, than smaller stores in competition, or as a trust or combine may furnish manufactured articles more cheaply than a number of factories in competition, so a large farm under corporate management, where the territory would permit, might yield a larger return. But usually it does not, because of the lack of care in tilling every foot of the soil well and making it yield its utmost; while on the other hand, such care is frequently bestowed upon the small farms.

The chief question in all of these industries is economy of consumption; or, in plain language, the lessening of expenses of handling the larger amount of the same grade of goods, enabling the employment of large machinery which lessens the cost of production, and the advantage of transportation.

Irrigation.

One of the best forms of intensive agriculture in modern or ancient times is that of irrigation. In the valleys of the Euphrates and the Nile, in India and Spain, this method furnished in ancient times a food-supply for many millions beyond the valleys in which the crops were raised; and especially in modern times in the western part of the United States, in the so-called arid region, irrigation has been carried on with great success. Irrigation contributes to the density of population, and therefore develops a better system of industrial coöperation, which yields a higher return of economic product for the labor employed.

Irrigation will not only allow the use of lands that could not otherwise be called into service, but by proper use of lands of insufficient rainfall they may be made to yield a larger return for the labor and capital expended. It has been demonstrated that agriculture is an industry of diminishing returns. The whole trouble with it as an industry is, there is a limit to the amount which an acre will yield. You may double the capital and double the labor, but it is quite unusual to double the return. Therefore the importance of irrigation is to increase this yield beyond the ordinary return, with comparatively little labor. Thus it is that farm lands are made to yield a larger return each succeeding year, although it may be a larger return in quantity and not in exchange value. It is this intensive agriculture which prevents in a measure the population from overtaking the food-supply. Malthus demonstrated that unless there were positive and preventive checks on the population

which increases in a geometrical ratio, it would in time outrun the food-supply which increases in an arithmetical ratio. Among the various phases of a highly developed civilization, none is more important than intensive agriculture as a check to over-population. It enables one acre to yield a much larger food-supply than it otherwise would. It is in line with scientific fertilization, which forces Nature to yield her bounties more freely. A cheap food-supply is beneficial to the human race and to all forms of progress. By a cheap food-supply is meant the largest possible return of the land for the least possible effort, so that though the farmer may receive lower prices for his food, he is ultimately benefitted by being able to purchase manufactured articles at a lower price, for cheaper goods make cheaper manufactured articles. Suppose a man can by an ordinary method raise two bushels of wheat a day and another man can in the same time make a hat which is exchangeable for two bushels of wheat: if by the improved process of irrigation the man is enabled to raise four bushels of wheat in a day and the man can make a hat in the same time which is exchangeable for the four bushels of wheat, they are each advanced in wealth by the sum of two bushels and a hat. Their amount of wealth is increased, their well-being has been advanced.

One of the important effects of a cheap food-supply in the Old World was dense population. Owing to the cheapness of food the population multiplied rapidly, and in the imperfect form of government this cheap food developed despotism. A few individuals could under these circumstances rule the masses. But under enlight-

ened government there need be no fear of a race of serfs. All densely populated districts are in danger of the oppression of bad government, although the possibility is for the best government. In a country where the people are jealous of their liberties there can be no danger of the development of despotism on account of thickly populated communities. Indeed, the permanency of agriculture tends to develop permanent social and political relations. And one of the chief economic as well as social blessings is that the yield shall be permanent. A farmer practicing irrigation knows about what his income will be each year. That is, he rises above the uncertainty of drought and the fickleness of climate in general.

But what will be the Effect of Irrigation on Prices?

In general, prices are regulated according to the law of supply and demand, or, more specifically, by the marginal cost of productivity; and if a large amount of agricultural produce is thrown upon the market it will have a tendency to lower prices, until through the development of other industries it should be absorbed. But a small amount of irrigable land in the United States could scarcely be the controlling element in the establishment of prices. Should Kansas develop the arid lands of the West, she would be able to throw agricultural products into Eastern markets and the markets of the world more cheaply than could be done by agriculture in eastern Kansas, Missouri, or any other territory where irrigation is not resorted to. The products of the irrigable lands would receive the same price, regardless of the cost of production, as those of other lands, where the cost of production is greater. The result would be that larger

profits would come to the irrigated land, or else prices would fall. Should irrigation be carried on to such an extent that the farm produce should be increased sufficiently to cause a fall in prices, the poorer classes of farms would go out of use, while still the irrigated lands would continue to be cultivated at a profit. Whichever result might occur, the irrigated lands would profit at the expense of other territory, less favorably situated.

A high state of industrial organization can only occur in relatively dense population, and the rapid accumulation of wealth is dependent upon a highly organized community. The separation of producers into natural classes and their subdivision into specialized labor represent one of the most potent means for the accumulation of wealth. A successful division of labor can only be had in a relatively dense and well-organized community. This is marked not only in the utilization of labor, but also of capital. Capital seeks its best use and highest remuneration in a company of diversified industries and interests represented in a highly organized industrial community.

General Results of Irrigation.

Thus we shall find that irrigation may become a means of developing a permanent industrial life; of reducing uncertainty of agriculture to certainty; of removing restlessness and discontent. It will furnish a means of development of a higher industrial organization, including a division of labor, which will furnish a means of the rapid accumulation of wealth. It will insure better educational facilities and a higher educational standard. It will develop better social conditions. It will elevate the religious life and develop the religious nature. It will

furnish an opportunity for a higher political development, which shall be conducive to good government and the administration of justice. Therefore, with better schools and churches, with better means of social enjoyment, with a more perfect and satisfactory government, with good roads for rapid communication, with the use of the telephone and electric light, with a better water-supply and a more perfect sanitation, with a daily mail carrying the news to every farm-house, all of which are dependent upon a relatively dense population, farm life will be made the most attractive and wholesome life of the land. And these conditions brought about by irrigation may be extended to the fertile districts receiving sufficient natural rainfall, until we shall find that farm life, so uncertain and unattractive in the past, shall become the most attractive of all occupations, on account of its freedom and its social and political conditions. Then let us hope that the young man will return from the college to the farm and help his fellow in building up the most free, enlightened and attractive communities found anywhere in this broad land. It is dangerous to prophesy, but I will venture the conjecture that within fifty years in the United States there will be a change in the attitude of young men of good ability. Instead of seeking the law and medicine, and commercial and educational positions, they will return to the farm, where they will find full scope for their educated abilities in the industrial, social, economic and political life which it offers.

Forests and Fisheries.

As land considered as a factor in production includes all of nature, we find that one product of America has

been greatly neglected. The enormous waste of the spontaneous growth of forests in the early agricultural history of the nation reached the extent of prodigality. The axe and the firebrand made way for the crops of corn and wheat. No attempt was made to save growing forests and leave a source of enormous wealth to succeeding generations. We have no wise timber laws in the United States for the protection and cultivation of forests, as they have in many of the states of the Old World. Some few laws have been made for encouraging the planting and care of forests, but they have had but little influence. There are, however, some public parks in the United States which are termed Indian and military reservations, having the protective care of the United States Government, and some care has been taken to protect some of these parks from devastation. But the saw-mill has penetrated the great forests of the West and Northwest and taken out the best of the timber, and destroyed that which was young and growing. The waste of forests can scarcely be estimated.

Twenty-five billion cubic feet of wood is consumed annually in the United States, which is more than the forests of the United States annually produce. That is, it is equivalent to the wood-growth of five hundred million acres, which is far in excess of the forest acreage of the United States. It would be wise in the Federal Government to oversee the forests on lands yet unoccupied, and to preserve them. Foresters should be appointed to market the wood and care for the growing timber.

The United States has been more judicious in the establishment of fisheries for increasing the fish food-supply

of the United States. Nothing is more important than the stocking of our lakes and streams with fish to make up for the loss entailed by constant consumption. Every effort of the Government to increase the universal supply of food advances the means of civilization. It improves the economic conditions of the nation and is of vast importance in the shifting of economic conditions.

Land Tenure.

Whether the United States would have done better to adopt a different form of land tenure, by which the nation retained a large domain of forest and arable land which it could exploit by tillage or rental for the increase of the public revenue and the prevention of too rapid increase of agricultural area and the wanton destruction of forests, is not easy to determine. It was customary for the nations of the Old World to have such a domain. England, through the influence of economic writers,—among whom was Adam Smith, who pointed out the failure in the administration of these lands,—gradually abandoned the idea of national holdings.

In the Roman system the *ager publicus* was a source of great contention, distrust, and political corruption. The Spanish nation in its colonization had a method of setting apart a portion of the territory for the payment of the expenses of government.

The United States established a policy of small farms in the beginning. In the colonial period there was a tendency to adopt the European system, which descended from the feudal custom of having large tracts with small tenant farmers. But this system could not survive under the spirit of American institutions. As above stated, the

law of 1787 which provided for the survey of public lands in the Northwest Territory favored the division of the land into small farms, allowing any person who desired a farm to purchase it at a minimum price of the Government. The National Government has received large amounts from the sale of these lands for the support of the public treasury.

In the case of the admission of new States, two townships of land were devoted to the foundation of a university, and two sections out of each township for the support of the public schools. This, with little variation, has been the rule in the case of all States since 1803, when Ohio became a State. Again, in 1861, two townships of land were donated to every State in the Union for the founding of an agricultural and mechanical college. Other lands have been devoted to internal improvements.

The policy of the United States has been to sell to private individuals the great bulk of our agricultural land. These lands are nearly all taken, and succeeding generations cannot hope to greatly extend the agricultural area, but must be content with intensive cultivation of farming lands already in use, or must find occupation in other pursuits.

This fact of the growth of population and the limitation of the extent of agricultural area, coupled with the fact that the present possessors of the soil are owners, and therefore new generations have no right or title to the land which their fathers found and occupied, except through inheritance or purchase, have led many enthusiasts to advocate land nationalization. They base their argu-

ments upon the theory of the natural right of man to an equal share in the soil which God has given to the whole people and not to any particular class. They advocate land nationalization, or that all the land be in charge of the Government, and that individuals should hold or rent their lands of this landlord, who represents the whole people; that the rental paid should go into the treasury in lieu of taxes. While there seems to be a grain of justice in such argument, the whole plan appears to be impracticable. The United States, having adopted another policy in the disposition of our public lands, will find it no easy task to reverse the plan by an entirely opposite method. Whether it might have been better to adopt a plan of land nationalization in the beginning, is a disputed point. It might safely be said, however, that the Government could have been less prodigal with her lands, developed the agricultural area less rapidly, and yielded a larger net product of the industry of the nation in proportion to the expenditure.

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CHAPTER III.

LABOR AS A FACTOR IN PRODUCTION.

Service of Labor.

It is primarily only through the power of labor applied to land or to the forces of nature that finished products called wealth, are created. Labor is human exertion directed toward the production of wealth. It may be either directly or indirectly occupied in the process of production. Labor is either physical or mental; it is the "aggregate of those mental and physical capabilities existing in the human being, which he exercises whenever he produces a use value of any description." The person who is creating, either directly or indirectly, a product which is exchangeable in the market, or who is rendering some service to be sought for and paid for, is a producer of wealth or economic goods. According to Mr. Roscher, labor is usually employed in the occupation of nature's products, such as the taking up of natural fruits, fertile land, mines and forests, as well as mineral springs and other natural products of nature. Second, in invention and discovery. A great part of man's time is spent in devising new methods of operation, and considerable time is spent in the discovery of new elements of nature as well as their effects upon economic life, and also in extending the territory and increasing the number of nature's products. Third, labor is employed in creating raw materials by the manipulation of nature's forces,

such as the raising of timber, grain, wool, flax, cotton, etc. Fourth, by changing raw materials into finished products, such as the manufacture of machinery from the products of the mine and the forest. Fifth, distributing things already produced, giving them place value by bringing them near the consumer; and sixth, exchanging wealth products, so as to satisfy wants and enhance the value of articles. Seventh, securing the person of the individual, by laws, government, and police force, while he is engaged in all these processes; that is, the protection of the state and society. Eighth, imparting instruction, either religious or secular. Ninth, directing the labor of others, which is among the most important phases of economic production. And finally, making laws for the protection of the people and their general welfare. In these principal occupations labor finds its service and from them receives its reward.

Extent of the Labor Force.

The progress of a community in wealth-making, other things being equal, depends upon the extent of the labor force. Up to a certain point a community is productive according to the extent of the labor force. This labor force will be great as the population is large, if we consider a long period of time. And by this extent of labor is meant the number of hours actually employed in rational service, as well as the quality of the labor. In some nations this labor force is very great, according to the population as it is marked by few deaths rather than by multitude of births. In another way the restriction of emigration and the encouragement of immigration of able-bodied persons will have a tendency to increase the labor-

power. Also, this labor force is estimated in proportion to the small number of idle and inefficient persons in comparison to those who are self-supporting and able-bodied. Again, it may be further stated, that for efficiency of labor force the number of males should to a certain extent exceed the number of females. In considering the number of idle and inefficient, it will be found that persons between fifteen and seventy years of age represent the strongest labor force. In France, 68.06 per cent. is numbered between these ages. In England, 61.02 per cent.; in Germany, 62.07 per cent.; while in the United States only 59.06 per cent. are between the ages of fifteen and seventy,—showing the efficiency of the labor force in France in proportion to the population as compared with the United States and other countries. The relative efficiency of nations may gradually change. It appears also that the number of defectives, dependents and delinquents of the United States is large in comparison with France and other countries. In the United States 496 out of every 100,000 belong to this class, while in France 405, Belgium 226, Sweden 407, Norway 532, Great Britain 452, Germany 410, Italy 343, of each 100,000, belong to this class. This is a statement of our economic conditions, rather than a sociological defect, as in the case of the United States the defectives are carefully enumerated and well cared for.

Quality of the Labor Force.

While much depends upon the extent and general character of the population for effective labor-power, the quality of the labor has much to do with its efficiency. Thus, strong, temperate, industrious men yield a larger return

in the production of wealth than weak, intemperate and shiftless laborers. It is evident that a class of laborers enervated by living in a warm climate will not do as much work as those of a temperate climate, on account of the languor which possesses them. The spirit of the laborer is also to be considered: a well-kept, well-fed, independent, and happy, or at least contented laborer, is of far greater economic value than a poorly fed, poorly clad, discontented individual. Good wholesome food and a sufficient amount of it are conditions necessary to the best quality of labor. Also, the native strength of laborers has much to do with their efficiency in production. The character and quality of work done depend upon the spirit and will-power of the laborers, and these, in turn, depend largely upon the moral and intellectual characteristics. While labor is divided into intellectual and physical, even physical labor must have intelligent direction; therefore the intelligence of the laborer has much to do with his efficiency. Therefore, for the best service of labor, it is eminently proper that supervision should be had over sanitary conditions, the homes, the kind of food employed, and social condition of the laborers, in order that their highest service may be obtained.

Various Grades of Labor.

The lowest grade of labor that is employed is slave labor, for the slave has no interest in the amount or quality of the work done. He has no interest in the finished product and no interest in the care of tools or property; having no political or social status, he does not work with hopeful energy. In the ordinary wage system a higher grade of skill is possible than in slave labor, be-

cause the individual has political and civil rights guaranteed to him. He is his own master, and able to make his own contract. His pay, instead of being determined by the lowest animal wants, is determined by the kind and character of the work done. Nevertheless, in modern times we do not find him a contented and hopeful laborer, on account of the uncertainty of employment. And it is somewhat to his discredit that he has less interest in the quantity and quality of the work done and the care of materials and tools than he ought to have. While in one sense his interests are identical with those of his employer, he has not always worked in his employer's interest.

The piece wages system or the piece price plan is in some respects of a higher order than the wage system, for in this case the pay is determined by the actual amount accomplished and the individual receives greater encouragement while the work lasts; having an interest in the amount done, he puts forth all of his energies, which unfortunately frequently sacrifices quality and character of service.

Men who are employed in profit-sharing or in co-operation have the highest ideal system of labor. While they have the privileges of the highest grade of wage-earners they also have a direct interest in the care of tools and material, and in the amount and quality of service rendered. They have also an interest in the surplus earnings of capital and labor over and above actual wages paid. This gives them a hopeful and cheerful disposition. Wherever coöperation can be successfully carried on, it has a tendency to enhance the efficiency of the labor-power

and to raise the standard of life, thus creating better social conditions. But it seems scarcely possible that this can be entered into under all circumstances.

Division of Labor.

The quantity of wealth produced is greatly increased by the division of labor. This increases its utility in every way, although not without certain economic defects. By the division of labor is meant, that each individual, instead of attempting to obtain directly or create all of the goods which he needs for consumption, performs a small part of the creation of a single article and exchanges this service for the supply of all his other wants. By this method the time of apprenticeship is greatly shortened, and the laborer soon develops extraordinary dexterity or skill in performing a single service. There is also a great saving of time, for each individual is kept in a single place and in a single service; for the same reason, it is a saving of mental and physical strength. Division of labor also furnishes an opportunity for the distribution of abilities; as men are endowed with different characteristics and capacities which fit them for different occupations, so the division of labor makes it possible to fit each one to his proper place. Each one seeking to perform a single service in the easiest possible manner has facilitated invention. It prevents waste and saves interest and insurance by direct service. It is the concentration of the attention of the laborer on a single process that enables him to devise methods of saving labor. The improvements in the steam engine, in taking the seeds out of cotton, in the equipment of shoe factories, cotton mills, and iron and machine shops, have come about in

this way. The machine grows from a simple, clumsy device, to a complex, perfectly acting instrument, by the perfection of a single part at a time. Division of labor allows women and children and "half-men" to work, thus enabling them to contribute to their own support, economizing the labor force of a community.

But it is not without its evil effects, for in forcing the mind to perform only one service it has a tendency to make the laborer narrow, to decrease his general intelligence, and to render him unacquainted with the relation of things. It also tends to a closer competition of labor, and for a time hinders the mobility of occupation; but this is gradually being broken down, because of the excessive division of labor and the use of machinery which renders it possible for a laborer to learn in a few days or a few weeks the processes of a single occupation. The chief danger of the excessive division of labor has been in the excessive inducements offered to children to work long before they are ready for the ordeal. This has been prevented to a certain extent in modern times by restrictive laws.

Coöperation of Labor.

All laborers appear to be competing with one another in general, and especially within the different groups. The rate of wages is determined to a certain extent by the number of laborers demanding employment in comparison to the number sought, or, in other words, upon the law of supply and demand. Hence, when a vacancy occurs where ten laborers are needed, a hundred immediately appear, seeking the position. Yet in the creation of wealth all laborers are working unconsciously together in making

goods more abundant, and consequently cheaper, and the means of life more satisfactory. Yet laborers, observing the competition in the market, have sought to coöperate with one another in obtaining a higher rate of wages and in the satisfaction of social and economic needs. In doing this they have rendered one another great service in keeping up the standard of life, and, by agitation and education, advancing the rate of wages.

Increased Productivity of Labor.

Labor has thus continually increased its productivity. Introduction of the machine and modern processes of production have enhanced the power of labor to create economic goods. By the aid of machinery, labor can accomplish more now in an hour than formerly in a lifetime. It is true that this is dependent somewhat upon the aid of capital; but in some industries labor does the greater part of the work, while in others capital performs the greater service and labor does but little. One of the complaints of labor in modern times is, that it has not received a fair share of the product of industry caused by the increased production consequent upon the use of machinery, the skill of labor, and a higher standard of life.

Improved Condition of Labor.

It will be found, however, that the laborer's wages have increased gradually from decade to decade; and this is evident from the improved condition of labor. The homes are better; the improved intellectual and moral conditions of labor are evident everywhere. Better food, better clothing, and better home comforts, represent the improvement of labor during the past fifty years. It must be remem-

bered in considering these questions, that periods of depression in which thousands of laborers are thrown out of employment must be considered as abnormal conditions, and in the economic sense the average improvement of the laborer must be taken as the basis of measurement of his welfare.

Labor Organization.

To a large extent this has been due to the exertions of the laborer himself. Improve the condition of a laborer and he will command a higher rate of wages; pay him a higher rate of wages and he will have the means of improving himself. Thus is perpetuated a favorable condition of labor. But it is through labor organizations that more has been done to educate the people to consider favorably the demand for better wages. Possibly wages have been advanced through strikes and close organization; but chiefly through the development of temperance, the improvement of the general social condition, the increased intelligence of the laborer, making him a better laborer, improvement in wages has taken place. Labor organizations have sought to create a monopoly of labor to compete with a monopoly of capital. They have tried to shut out of a given field all laborers not belonging to their organization. Yet labor organizations have not been without their own defects, as they have failed to develop a broad and catholic spirit among laborers, and in spite of their education have failed to realize the best results of broad citizenship and intelligent humanity. They have developed a selfishness which has in many respects been detrimental to their best interests.

Protection of Labor.

The world is slowly learning that the labor force of a community is its best wealth, and that it needs protection. Those employers who look carefully to the interests of their laborers receive a large reward for their services. Laborers are receiving protection in very many ways. The laws guarantee them the right now to organize, to assemble peaceably, and to strike when their interests seem to demand. There was a time when these privileges were not permitted. Again, they are protected by law from injury by machinery, and foul air, and are secured in their rights to a share of the finished product as wages; in fact, are protected in all of their rights and privileges.

Labor Laws.

A careful glance at the numerous labor laws which have been enacted in our leading States, especially in Massachusetts, which provide for sanitary conditions of buildings, for the protection of life and limb, for the guarantee of the wages of the laborer as a first lien on the product, for the security of the rights of contract, and many other matters, show conclusively how well laborers are protected by law. Gradually each year we find everywhere measures enacted for the protection of the laborer in mines and factories. The establishment of labor commissions in over thirty States of the Union for the purpose of gathering statistics and information concerning the condition of labor, has had a vast deal to do with the amelioration of the condition of labor and the protection of the laborer. Through these statistics and the united efforts of laborers many laws have been enacted in their favor. Here as elsewhere, in all remedial legislation, grievous errors have been committed,

which can only be remedied by time and increased intelligence on the part of the laborers who make the demands and on the part of legislators and philanthropists who endeavor to advance their cause.

Eight-Hour Law and its Effect on Production.

Strenuous efforts have been made by labor organizations to raise the rate of wages and to reduce the number of hours of labor. It may be stated as a fact, that the general well-being of society would be promoted if each individual would labor eight hours a day, provided that this labor could be faithful and continuous and that the remaining portion of time not used in sleeping and eating should be devoted to self-improvement and wholesome recreation. The rapidity of the production of wealth in the world has not always conduced to the highest well-being of society, on account of the sudden changes that occur in economic life. While a large number of people labor at excessive hours, others are falling short of this average to a considerable extent, but it is the service of labor rather than its amount that yields general social well-being.

The economic effect of suddenly changing from ten to eight hours would be diverse in different industries. In some instances, where the labor is severe, more would be accomplished in eight hours than in ten; while, on the other hand, where time and the use of machinery are chief elements, less would be accomplished in eight hours than in ten. Taking an average of industries, it will be found that less will be accomplished in a day of eight hours than in one of ten; while considered by the hour, more will be performed in a given hour in an eight-hour day than in a ten. In considering the change from a ten- to an

eight-hour day, people seldom consider the effect on general production. If the same could be accomplished in eight hours as in ten, the question arises as to whether there would be an increased employment of the number of men; if the demands of production can be accomplished in eight hours as well as in ten, the shortening of the day would not, as the unionists hope, give room for an increased number of laborers. On the other hand, if less can be accomplished in eight hours than in ten, will not wages necessarily fall by the day though they may rise by the hour? The question involves many economic considerations, for it must consider the amount of capital seeking employment, and the increase or decrease of the number of laborers seeking employment, and the effect on wages; it must consider the amount of increase or diminution of the total product of industry, and the increase or decrease of the amount of land used in obtaining the product and the rent of the same; and finally, it must include the increase or decrease of the rate of profits which accrue to the managers of the business. It will be seen that the real economic effect is determined by its relation to all productive and distributive industries. Whereas a general benefit would be derived if such a change would take place, it is difficult for the laborer to realize such a benefit in the form of increased remuneration for his services. If such a change takes place it should occur gradually, so that different industries could be adjusted to meet the new conditions.

Restriction of Immigration.

The great attempt of labor unions to limit the number of laborers entering a given field and thus create a monopoly of labor, has been a cause frequently urged for the

restriction of immigration. As wages would depend upon the number of laborers seeking employment in comparison with the demand, if laborers should be kept out of a nation by means of a well-regulated law it certainly would have a tendency to raise wages. Efforts have been made on the part of the United States to keep out the low-grade labor of China, and, more recently, other countries of Europe. It appears that if labor is to be protected in our own nation and a higher standard of living is to be preserved here than that which obtains in the Old World, it is necessary to establish some restriction of this kind. One of the arguments for keeping up this standard of life and raising the wages of laborers, used by certain politicians, is to institute a high protective tariff which will develop the industries of the country, make a demand for labor, and thus increase wages. It is difficult to see how this can be effective except in a very general way. The question will be further discussed under Taxation.

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CHAPTER IV.

CAPITAL AS A FACTOR IN PRODUCTION.

Nature of Capital.

While labor took the initiative in the process of production, capital is absolutely necessary in nearly all forms of modern production. Having its origin first in labor, it finally in turn supports labor in the process of production, and may even limit the amount of labor that may be employed in a given territory. In the building up of industries, labor logically preceded capital; but in the practice of modern production, capital takes the initiative. Thus, labor first produced wealth, and the part of wealth set aside for the purpose of creating more wealth was called capital. All wealth which is not used directly in consumption as such, without regard to the creation of other wealth, may be called capital. Capital is the wealth set aside with the determination of use in the process of production. But capital itself is consumed more or less rapidly, for in every process of production, although it is consumed it reproduces itself. The whole body of capital is consumed rapidly, and reproduces itself rapidly; so that the existing capital of the world is of very recent origin. Capital is said to be material, or immaterial; some persons classifying as immaterial capital, good-will in business, credit, superior skill, etc. But these could nearly all be referred to some other category rather than to capital. Al-

though this is a question of dispute, it is better to classify all capital as material, and objective.

The forms of material capital are generally included in—first, materials to work up, tools to work with; and subsistence, as given by Mr. Walker. A more analytic classification gives the forms of material capital as follows: Improvements upon land, as well as all buildings, streets, and roads; tools, instruments, and machines; useful domestic animals; materials for manufacture which reappear visibly in the product; food and clothing for the support of laborers; materials for manufacture which will not reappear in the product; stocks of goods for sale; money; means of transportation; and weapons for defense.

Non-Capital Wealth.

It will be seen from this that the wealth used otherwise than in the form of capital is comparatively small. But the fundamental idea in capital is, that it shall either yield a revenue, produce more wealth, or provide for a future income and future enjoyment. The whole tendency seems to be to make capital that form of wealth which is set aside for the satisfaction of future needs; while non-capital wealth is that which is used for immediate consumption, without regard to future use. Considered in general, this is the essential definition of capital. However, wealth may be lying idle in the bank, with the intended use of production, which would be classified as capital.

Saving and Abstinence.

Writers have frequently asserted that capital arises from saving and abstinence, and, whether intentionally so or not, have conveyed the idea that capital arises out of sacri-

fice or parsimony. But the real truth is, that capital is the surplus over and above the amount consumed, which is again turned into business in wealth production. The word "saving" is all right if properly understood. It is simply refraining from the use of wealth in one way, that it may be used in another. It is the intention always to use capital, but not to consume it without leaving its equivalent plus a marginal return in some form of wealth. There may be present self-denial for the sake of a larger future enjoyment, or the refusal to use wealth in one way that it may yield a larger amount of rational enjoyment in some other way. At any rate, economy of consumption has a tendency to enlarge the amount of capital.

Fixed Capital and Circulating Capital.

It has been convenient to classify the different forms of capital in regard to methods of consumption into fixed and circulating. The former includes all concrete forms of capital which are more or less permanently established. Circulating capital is that which is used in a single process of consumption, like coal, or raw material of any kind passing into the finished product. It must be understood that all concrete capital is consumed in the process of production, and that this classification is merely relative in regard to the time used in consumption. It is desirable that circulating capital should be consumed rapidly, in well-ordered production, and that fixed capital should last as long as possible. Thus, in the consumption of coal, wood, or any raw material, it is desirable that it should be consumed rapidly because this indicates rapid production; while it is desirable that machinery, buildings,

railroads, and all forms of fixed capital should last as long as possible.

Specialized and Free Capital.

Capital is again classified in reference to investment, into specialized and free. It is said to be specialized when it is bound up in a given business from which it cannot be withdrawn without loss. Thus, if a man should have \$10,000 invested in a stock of boots and shoes, it would be impossible for him to withdraw this capital instantly and invest it in grain or flour without loss. He must wait the slow process of trade or sale. On the other hand, free capital is usually in the form of money or securities which are immediately transferable and are awaiting investment. It takes a large amount of free capital to run any established business. And the amount of business which may be carried on is to a certain extent limited by the amount of available free capital. All new business must be developed through the use of available or free capital, upon whose service the business prosperity of the community is largely dependent. Unless it be plentiful, new business cannot be established; and unless there be sufficient to run the old business, it will fail. Business communities have frequently suffered on account of the absorption of all free capital in given industries and a deficiency of the supply to carry on business. When large amounts of property pass into the form of fixed capital which fails to yield a return upon the investment, or when large amounts of capital are specialized in the form of stocks of goods or materials for which there is no immediate demand, business is in a bad condition, and there is danger of a commercial crisis, or trade depression.

Pure and Concrete Capital.

When the term capital is used, it generally has reference to what is known as pure capital, and not to the concrete forms. For example, a merchant, when he talks of his capital, generally, estimates it as so many dollars, without reference to the concrete forms of his capital stock. A large proportion of his capital may be in the form of goods, such as bolts of calico and other forms of merchandise; but these may change from time to time, the same articles not remaining in the store but being sold and replenished by others,—yet the capital may remain the same. In this rapid manner pure capital is said to transmigrate from one form to another. The largest proportion of capital is found in the concrete forms of economic goods or wealth, and the estimation of the value of these in terms of money represents the pure value.

Accumulation of Capital.

It is generally supposed that large masses of capital are handed down from generation to generation with no economic process except that of investment, but this idea is not correct; for although capital is saved, it is saved to be consumed, and replaces itself quite rapidly. Some authors have discarded the idea of the accumulation of capital, and have used the term growth of capital as preferable because of its constant power of reproduction, holding that the increase of capital is largely analogous to the increase of population. The creation of capital depends largely upon the direction given to industry. Anyone who has command over a certain amount of free capital has a direct or indirect control of a corresponding part of the productive powers of industry. There are various ways

in which he may use this free capital. He may give employment to labor in the development of industry which will enable capital to reproduce itself and perform a service in other ways. The capital will then be replaced with a margin of increase which is called profits. He might use it for immediate gratification by extravagant expenditure in costly suppers, but he prefers the former, and the result is the growth of capital. The process of the growth of capital consists in the increase of the fund of wealth from which savings may be made, and the determination on the part of its owners to refrain from immediate consumption and divert wealth into the form of productive industry. The former represents the direct method of the creation of wealth, the latter that of saving it for future gratification. The desire for accumulation has been present in economic life, and has increased with the diversity of occupation. It is inherent in the nature of man, and influences largely the will in its determination not to consume goods but to preserve them for future use.

Momentum of Capital.

The services of capital in modern production have become so very great that its power actually increases with its own momentum. Many find fault with capitalists, as a class, because it appears that they are all working in combination against labor. In reality each one, like the laborer, is seeking to receive the largest return for services, either in present or future gratification. In present gratification he obtains this satisfaction by the lavish expenditure of wealth. He hopes to receive a larger future gratification by turning the wealth which he has in his possession into productive industry, and thus in-

creasing his wealth and consequently the means of future enjoyment. Where a large number of persons, each possessing wealth, enter a corporation and turn their attention to productive enterprises, each has an industrial power which is large in proportion to that possessed by the single wage-earner. This large number of men, moved by the same idea, the gratification of personal wants, make it appear that capitalists have all combined to carry out their own selfish aims. The momentum of capital in modern industry is great, and moving forward with its own inertia its cumulative power is evident. The power of capital, then, rests rather in its own inherent nature than in the combination of any group of men called capitalists. Others have uttered their objections to the modern system of capitalistic production, and, like the socialist, have advocated the shifting of the management of capital from a few hands into the hands of the state. But change as we may the management of capital, its power in production will not cease.

Economic Significance of Capital in Production.

Capital is not only essential in modern production, but frequently is a limit to productive industry. As it takes the initiative in constructing buildings and machinery and providing raw material, the amount of industry will be limited by the amount of available capital that may be thus used. It matters not what form of productive industry may be practiced,—whether it is individualistic, socialistic, communistic, or coöperative,—capital is the essential feature to be considered in the beginning of any modern enterprise. Even those persons who begin a coöperative industry in any enterprise on the smallest

scale must have room to work, material to work upon, and tools to work with, before they can accomplish anything. It was maintained by John Stuart Mill and other economists that capital was used for the payment of wages, and that only a certain number of men could be employed, determined by the amount of capital devoted to that purpose, called a wage fund. But more recently it has been generally held that the laborer earns his own wages each hour, day or week that he works, and that capital merely provides the means of employment. But as the limited means of employment shows the limitation of laborers that may be employed, the effect is the same as if the theory of the wage fund were a fact. It is impossible to estimate the place of capital in production as compared with labor, but in the modern system of production capital has become an absolute necessity along with labor.

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CHAPTER V.

PRODUCTION INFLUENCED BY SOCIAL ORGANIZATION.

Private Organization.

Under free competition each individual seeks for the largest possible return for labor or sacrifice expended, but in seeking this return each works under limited opportunities. Owing to the fact that there are several factors in production,—land, labor, and capital,—it is necessary that the various forces in production be organized by some one in order that business may be carried on. One man owns the capital, another the land, and another has the right and control of his own labor. If these three were to come together, business might be facilitated on a small scale. But as a rule this question of bringing land, capital and labor into combined effort is settled by a group of people called managers of business, or, sometimes, captains of industry. A person who has the power to labor for wages may not have the ability to conduct business, and possibly not the opportunity. Owing to the fact that large amounts of capital, labor and land are essential to most modern enterprises, it requires a large amount of business skill and ability to carry on such work successfully. But few men have the ability and skill to carry on a great business enterprise. These organizers of industry induce capitalists to loan their money, build machines and construct factories and provide the raw material, hire laborers and manage the business, return-

ing to capital interest, to land its rent, to labor its wages, and retaining for themselves the profit of management. Here then we have a distinct class of people representing business management, the fourth great factor in production. Too much importance cannot be attached to this factor in the modern process, for after all, it is brain-power or successful management which more than anything else makes a business profitable or unprofitable. And it is the application of this superior skill which moves the wheels of industry and causes wealth to accumulate.

Firm or Partnership.

In private organization there have arisen from time to time different voluntary combinations of men who have been induced to organize on account of economic conditions. The development of these organizations, though in themselves voluntary, may be said to be natural on account of their essential outcome of previous conditions. In early times the manufacturer lived in his own home and gathered about him apprentices and helpers, and when articles were made he sold them from his own shop. He conducted his business alone, with a very small amount of capital and a comparatively small amount of labor. But after the invention of steam and the rapid development of other industries, industrial enterprises became much larger, and men began to associate others with them in the business of manufacturing or trading, and the partnership developed as one of the voluntary associations of modern production.

The Corporation.

As industry became more complex, enterprises became more extended and the establishment of industries which called for a still larger amount of capital became necessary.

A larger number of individuals went into partnership in production, and in the establishment of banks, insurance companies, the building of railroads, and the development of land and mining interests. As a large number of persons doing business together without the personal responsibility for all, they became a menace to trade and general business. In order that these institutions might be legally created, and that the people might have protection, they were incorporated by the municipality or state. They were then in the form to sue and be sued, and they could then be to a certain extent under the control of law, be made responsible for indebtedness. It is not the place here to discuss the imperfections of franchises and of corporation laws, or to show how through the carelessness of the governed and the faithlessness of the governing these corporations frequently became unjust machines for arbitrarily oppressing those who were not so carefully organized. The corporation came into use as a natural or essential voluntary organization of industry, as part of the mechanism of modern industrial life, and as such performs an immense service in production and at the same time wields great power in the political as well as in the industrial world.

Trusts and Combinations.

As industry developed and power manufacture increased through the extended use of steam, electricity, and water transportation, the industrial enterprises of the world became greater. Competition, which had been to a large extent shifted from individuals to corporations, became a battle of giants in production and distribution. Corporation was contending with corporation. The result of extra com-

petition in industries and the cheapened methods of production caused a fall in prices. Certain institutions could not make fair returns on investments of capital, and so they placed goods on the market below cost of production. This created such a distrust in business and such a depression of prices that there arose a method of agreeing upon a fixed price of goods in a given line. This method of arranging a price for all goods of a given trade is a method of combination, and is for the purpose of allowing the least productive business in any given line to pay at least the cost of production, and the more favorably located institutions yield a surplus return. Sometimes combination has been made between manufacturers and transporters of goods for the purpose of arranging rates and controlling the market.

But the most important and interesting phase of this subject is the extension of organization, in which all industries in a certain line pass into a superorganization called a trust, in which general stock is issued in proportion to the amount each corporation puts in. So, having formed this trust, the unprofitable enterprises are closed and only a few of the more profitable are continued in business. If the business will warrant it, all of the different institutions are kept running. At any event, they are run or closed as will best suit the interests of the trust. Having assumed control of the entire manufacturing interests in a given line, the next step is to fix a monopoly price, in order to obtain monopoly profits which depend upon the market. The object to be gained is the largest net return for a given amount of sacrifice, labor, and capital. This is not easy to secure, for the

law of supply and demand here enters the field as a determining power. This law assures us that if prices fall there will be an increased demand for goods, but not essentially in proportion to the fall. If prices rise there will be a falling-off in the demand for goods, but not essentially in proportion to the rise in the price. Expenses of management will increase in a certain proportion in respect to the amount of goods handled, and decrease as the number of articles handled decreases. The question to be answered then is, At what price will the largest net returns be secured? It is therefore not possible for a trust or monopoly to fix its price regardless of the demand, as it is limited in what it may charge for goods. Another limitation also on monopolies is found in the effect of prospective competition. If it be found that a trust has been making enormous profits in a given line, sufficient capital will be gotten together to compete with a trust, which of course makes the largest competitive units yet known. The threatened competition keeps prices within certain limits, which frequently brings them below monopoly profits. But more frequently the trusts themselves overestimate the market and fix the monopoly price above its normal rate, and thus injure their own business. It is possible for a trust or great monopoly to furnish goods to consumers at a less rate than they can be furnished under competition of a large number of establishments. If they would only consent to be reasonable and fair in their charges so as to make only reasonable income, there would be no better way of furnishing goods to consumers, for the price would be regular and cheaper than when furnished by competition of a large number

of institutions. The chief danger of trusts is in the fact that they take undue advantage of the markets. They raise the prices of necessities suddenly, before the influence of prospective competition acts. It takes a long time to get business in motion even after it is planned, and the sudden raising of the price of sugar, flour or coal for a month will yield an immense income to a corporation with such power. This may be done in such a manner as to be little less than robbery of consumers, who must pay the arbitrary price of trusts.

It is interesting to see what will be the result of this superorganization of industries. It has come about as an essential outcome of economic conditions, and until economic conditions change somewhat we cannot expect it to be finally disposed of. Men say they are obliged to combine in order to save business from destruction, so that everywhere we find the rapid development of trusts. Indeed, in nearly every great enterprise in the United States at present the trust finds its way, but owing to its irregular and loose organization there is a constant tendency to dissolution. While trusts are being formed rapidly, they also appear to be going to pieces rapidly.

Whether the trust shall take its place as a legitimate part of economic organization, as did the corporation, or whether it will be gradually eliminated by the action of the law and possibly by a survival of better methods, remains to be seen. It might be well to remark that capitalists and business managers through excessive combination point out the way to socialism more than any other agencies, labor organizations not excluded, and by their actions demonstrate a possible necessity of extreme politico-

economic organization. These facts influence many minds to believe that state socialism is one of the possibilities of the future. (See Bk. IV, ch. 2.)

Effect of Organized Labor on Production.

The organization of labor has a great influence on production, although the nature and extent of this influence is not easily defined. For while the organic action of labor may on the one hand keep a steadiness in the labor market, it frequently counteracts this result by creating a distrust in business, causing indirectly the discharge of many laborers who otherwise would continue to be employed. More especially is this result observed in the timidity of managers to enter new business. Upon the whole, it may be stated that as labor organizations become more prominent and more steady in their organization and more reasonable in their demands, their effect is to make stability of wages and to a certain extent to increase the rate. The labor service is greatly improved in quality, which of itself tends to increase the amount and the value of the product of industry. Could laborers and managers agree upon a method of establishing wages, such as a sliding scale or contract for a certain period of time, so that the business managers would know what to depend on, much advantage would accrue to industry. The agreement to settle everything by a joint arbitrating committee has worked well in several industries where it has been tried. If manufacturers and employers in general could count upon the stability of wages and the absence of strikes and other interferences of industry, production would be more regular and commodities could be placed on the market at a smaller cost.

Effect of Political Organization on Values.

The strength and stability of government has much to do with the stability of values, for the greater the security of property and labor, the fewer fluctuations of taxation brought about through extravagance or excessive demands, the more steady will values become. Every form of social organization has its influence on values. The government has not the power to create values nor to destroy them directly, but it may so coöperate with individuals as to regulate production. It may also by consumption increase the demand for a commodity and thus advance its price, or by a certain law increase or decrease the demand for it,—thus influencing the market. The action of the government frequently does materially affect markets. A good example of this is seen in the political uncertainty that occurs just before a presidential election in the United States: it influences business to such an extent as to cause stagnation in certain lines. The turmoils of some small nations frequently lead to a perpetual disturbance in business, rendering capital and all investments insecure.

Increased Productivity on Account of Organization.

Thorough economic and political organization will greatly enhance the productivity of wealth, while on the contrary poor organization leads to distrust and to expensive and slow production. The influence of the firm, the corporation, the trust, in the rapidity of production, is well known. The grouping of people in well-ordered homes, the creation of voluntary or involuntary groups wherein division of labor is practiced, enhances the power of pro-

duction. By organized effort wealth is rapidly increased, because all of the forces of production are rendered highly efficient.

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PART II.

DISTRIBUTION OF INCOME.

CHAPTER I.

PRINCIPLES OF DISTRIBUTION.

Net Product.

The net product of industry is that which remains after all expenses of production have been paid. By expenses of production is meant only the waste or use of capital, which must be replaced, and the income over and above this is called the net product. In considering a given manufacturing plant from the standpoint of the technology of wealth-getting, the net income would be that remaining after all expenses of rent, interest, wages and expenses of management have been paid. But it must be remembered that the net product considered here is the amount distributed among the different economic groups represented, namely: landlords, capitalists, wage-earners, and managers; or in other words, into different shares, such as rent, interest, wages, and profits. The methods of distributing the net product are worthy of consideration. First, distribution of wealth in this connection has reference to ownership of property rather than exchange of place or location on the earth's surface. Into whose hands

does the net product of industry fall? In investigating the principles of distribution it is well to assume their operation under laws of free competition. We are not concerned at present with the actual conditions of an industry instituted for the purpose of making money, but rather with the general laws arising from economic production without interference with concrete conditions. Indeed, all economic law that may be demonstrated to be final and exact must operate under the conditions of free competition. Every discussion of the abstract principles of political economy recognizes this fact. Interferences which may be caused by monopoly or by government are to be considered in a separate connection.

Nature of Distribution.

Mr. Mill held that production is natural and therefore its laws may be observed, but that distribution is artificial, consequently it is not possible to discover constant and certain laws. It is true that production is less interfered with by conscious human influences than distribution, the latter being disturbed in its natural course of free competition more readily than the former; but there is no reason for assuming that there are not natural processes in distribution as well as in production. The Socialists advance the idea that natural distribution, like natural production, is the only just method. The only difficulty in all this discussion is to understand what is meant by the term "natural." What the socialists consider natural distribution is finally settled when they discard the *laissez-faire* doctrine, or that of absolute freedom in competition, and insist that the state should regulate this just distribution, as it is the only body that has power

to attend to it justly. Henry George states also that the "just distribution of wealth is manifestly a natural distribution of wealth, and this is that which gives to him who makes it and secures to him who saves it." Here again is the question of the use of the term natural. It is evident that it is determined by purely *a priori* argument.

It may be assumed that there are natural economic laws based upon the active conditions of economic society, but they do not assume a state of nature, for society is built up by a struggle against nature, or rather by the mastery of nature. In other words, the economic law of distribution does not in any way precede the construction of economic society, and what might be natural distribution under hand manufacture might be unnatural under power manufacture. Yet, in the consideration of the main facts of distribution,—that is, into whose hands the net product will fall under a state of free competition,—and in determining upon what principles the net product of wealth passes into certain hands, we may appeal to general laws. Afterwards we may consider the exceptions to these laws and inquire into their various interferences, for it is evident that these laws do not consider the necessities of man nor the justness of distribution. They only ask what happens, and why.

Divisions of Net Product.

The great problems of economic society have been stated as follows: first, how to create the largest aggregate of utilities, or of wealth; second, how justly to divide this amount; and third, how to make the product minister to the permanent rather than to the transient well-being of society. These problems go beyond the bare expression of

economic law, and seek the ultimate of economic existence. With society putting forth its unconscious effort to create economic goods, and each group seeking to obtain the largest return for time and service in the form of wealth, it is found that the net product falls regularly into four categories: rent, interest, wages, and profits; to which is added sometimes, for the sake of convenience, a fifth category, called "anomalous" fortune, which is only a term to represent the unclassified. But how are we to determine the amount which will pass into each separate category? Is there a law which will determine this? It is easy to observe that the amount which goes to rent, interest, or wages, for instance, is quite a constant quantity. It is also conceded that the average profit from year to year remains about the same. But what determines the quantity which passes into each of the several categories? The surplus which obtains on account of excessive fertility or favorable location of land is called rent. Rent is easily determined as the difference between the return upon that land which will just pay expenses of cultivation and the return from more fertile land. If this principle is extended to other industries, monopoly or proprietorship of fixed material or conditions, the rent principle appears. Wages are held to be the reward of labor, distinct from the earnings of capital or any other agency. The laborer receives wages for his toil. The manager of business receives profits as his reward for ability to organize and superintend business. The capitalist receives interest on account of his ownership of capital, and on account of the increase of the net product due to the services of capital. The fifth category,

which is sometimes used, that of anomalous fortune, would include all those material goods not included in the preceding categories. The above statements represent the factors of the four categories of distribution.

Undivided Net Product.

It sometimes happens that a small proprietor who manages his own business receives the entire product,—rent, wages, interest, and profits. As for example, a small farmer who owns his farm receives rent on account of fertility and location, wages on account of his own labor, interest on account of the capital he has invested, and profits on account of the skill in managing his affairs. Yet in economic analysis all of these divisions are clearly discerned, for rent arises out of land whether a man works his own land or that of another.

Law of Equal Returns.

In determining these divisions of the net products there are certain laws which may be observed, although in practice, owing to certain interferences, they show nothing more than tendencies. Indeed, a large number of economic laws when put to final test show nothing more than general tendencies; yet these general tendencies are important for consideration. Let us suppose that we have free competition among all industrial people, and that we have likewise perfect mobility of capital and labor so that they will go wherever needed, and that there is sufficient land to be called into operation when it is needed. Add to these conditions one other, namely, that each knows what other business men are doing or about to do; then we shall find that the last increment of capital or labor or skill will receive the same remuneration as the preceding

increment of each most recently employed in any way. That is, a dollar, or a day's labor, or a day's managing service, will yield in each case as much in one business as it would in another, and will be determined by the remuneration of services in the last investment. Now this arises out of the fact that these various factors of production which are enumerated will seek the largest possible return of wealth for a given sacrifice. For it is easy to see that, under the conditions mentioned above, labor will tend to go where it will obtain the highest reward, and if perfectly mobile the equilibrium of demand and supply will be established and wages in the same employment will be the same the world over. The same is true for capital. For if men understand that other businesses are more remunerative, and if capital moves freely, it will seek the highest rewards, but in its attempt to do this the equilibrium of supply and demand will again be established.

Now it is well known that capital, labor and managing ability are not perfectly mobile, and it is also well known that each man does not know what all other business men are doing or are about to do. But there is a constant tendency to realize this principle; that is, there is a tendency in interest on capital to become the same no matter where it is invested, for wages to reap a certain average rate, and for rent to become more constant from year to year. The interference of monopoly and government destroys the mobility of capital and labor, and thus modifies the action of the laws of distribution in relation to them. Yet, upon the whole, equal returns to last investments appear to be more and more constant.

Dynamic Law of Distribution.

It has already been stated that the divisions of the net product into wages, rent, profit, and interest, if taken at any given instant will represent a more or less constant return to each, but if industrial processes are set in motion the relations are liable to change from time to time. Thus, the amount of labor, land or capital in the market at any given time, varies, and hence yields a variable amount to wages, rent and interest, respectively. Considering productive enterprise in motion, land, labor, capital, and managing ability will tend to be remunerative inversely in proportion to their increase; that is, the one that has the smallest relative quantity in the market reaps the greatest reward at the expense of others. In other words, if labor and capital remain the same in quantity and a large amount of land be suddenly thrown upon the market, rent will have a tendency to be low while labor and capital are called into use, and will reap a relatively larger income in proportion to services. Or, if land and capital remain constant in quantity, and a large amount of labor be thrown suddenly upon the market, wages will tend to fall and rent and capital increase in proportion. Thus, if capital is doubling itself in forty years and labor in twenty, land remaining constant, wages will be lowered and interest raised. It is in this way that a sudden increase in the laboring population tends to lower wages, or the taking up of a large area of agricultural land suddenly, lowers rent.

Nevertheless, under normal conditions of industry the law of supply and demand is brought into operation and the equilibrium of distribution appears. Thus, if a large

amount of labor is thrown into the market it seeks employment, and if capital is available it employs labor. If land is available it is also called into use, so that they stand relatively in the same position as before. This law manifests itself then largely in the irregularity of social development, which is soon overcome by the reestablishment of normal relations.

How the Gross Product is Distributed.

By gross product is meant the entire amount earned in a given industry, or, if considered in the concrete, of a given plant of said industry. It represents the entire earning capacity of an industry as evident from its annual output before expense of running or economic distribution has taken place.

In considering a specific business, the gross profits are divided into: replacement, which means the making good of the loss of capital which has been invested in any given business; interest, which must be paid for the use of capital to the man who loans it; insurance or a certain sum set apart, taken from gross profits, to cover past or future losses, because the revenue varies from year to year. The wages of superintendence or management generally appear in the forms of salary; and finally, the fifth element is called pure profit. This accrues to the manager on account of superior wisdom in the management of business. This represents the analysis of a single business from an economic standpoint.

It is clear from the foregoing that the amount of profits which each factor receives is not immediately dependent upon the proportional amount each corresponding factor in production supplies in the process of creating wealth,

hence we must find some other determining cause. One school of economists has held that nature, labor and capital are the three sources of value, and from each one there flows a stream of value coming from its respective

Diagram A.
PROPORTIONAL DIVISION.

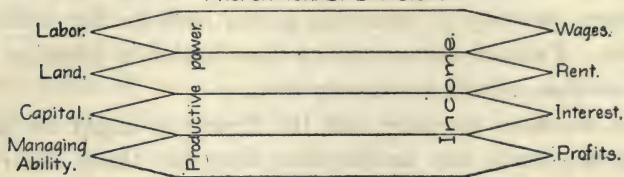


Diagram C

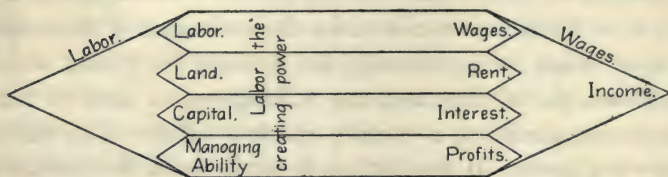
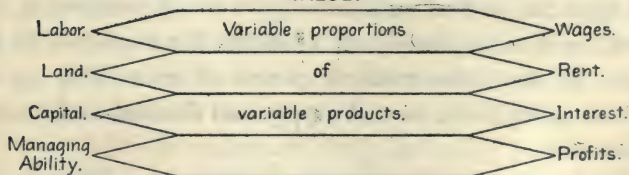


Diagram B
VALUE.



source; that the amount and volume of this stream is dependent upon the power of land, labor and capital in production. (See diagram A.) It is held that there are three distinct streams flowing from source to mouth; that

just the same amount of value as has flowed from each source passes into the income of the persons who own the soil, the capital, or furnish the labor; that the force of the stream of value is dependent immediately upon the force of the stream of productive power; and that each source thus represents a distinct productive power, with a distinct quantity of economic goods, each having definite value. This of course makes distribution a question of production, which is scarcely true.

If we were to carry out the figure it might be said that the truth lies in the fact that the three separate streams of productive power when once entering into the process of production spread out again into distinct branches in their value-creating power. (See diagram B.) That is, the stream comes under the influences of the causes which create value, namely, the demand for goods, which includes the ability and the willingness of men to take economic goods at a certain market value. The value-creating power in production depends upon the intensity of men's needs and the quantity of means which they have for supplying these wants. That is, the amount of income flowing into these three separate categories will depend, not upon the several amounts of powers of production, but what has been separated out from the three streams in the figure by the value-creating power of man; that is, we refer it again to the law of supply and demand and market valuation.

Another group of economists assume that labor is entitled to the entire product because it is the source of value, and that labor would receive this product if it were not for a band of robber landlords, capitalists and managers

who suddenly appear to divide the returns of labor among themselves. This argument cannot be maintained, because labor is not the only cause of value; nor would it be true that after rent and interest had been separated out, wages would take what was left,—for indeed there is no residual claimant, either in rent, interest, or profits. (See diagram C.)

The problem may be stated thus: Interest is a varying proportion of varying product of industry; wages represent a variable proportion of a varying product of industry; rent is a varying proportion of a varying product of industry; and profits are a varying proportion of a varying product of industry.

Let us refer once more to market values, and ascertain how they are created. In order to simplify matters, let us express the market value in terms of price, which is the money measure of exchange value. People do not exchange goods in a market without a probability of some advantage derived from exchange. The strength of the demand relative to the supply will fix the valuation of goods in a market. Let us take a very simple case, a case of a single transaction between two individuals. Suppose Mr. A desires to buy a horse, and puts the same estimate on the value of one hundred dollars that he does on the horse. It is evident that he will not pay more than one hundred dollars for a horse. His neighbor, Mr. B, has a horse which he values at forty dollars. It is evident that he will not sell his horse for less than this. There is a possibility that an exchange will take place here somewhere between forty and one hundred dollars. Should it take place at seventy dollars, each man will

have a gain of thirty dollars. That is, the price will lie somewhere between the maximum valuation placed upon the horse by the buyer and the minimum placed upon it by the seller.

Now suppose instead of one man there are three bidding for the horse; suppose A, C, and D wish to buy the horse. A, as before, values the horse at one hundred dollars, C values it as equivalent to eighty dollars, while D considers the horse worth to him only sixty dollars. It is evident, although only one man can buy the horse, it is available to any one of the three. B still values his horse at forty dollars, and the others bid in competition for it. When they reach \$60, D drops out; when they reach \$80, C will drop out of the race, and A, who is willing to pay \$100, will buy the horse at the lowest margin possible over what the next highest bidder offers, namely, \$80. In this one-sided competition, which frequently occurs, the price is fixed somewhere between the valuation of the successful bidder and that of the highest unsuccessful bidder, with a tendency to approximate the latter.

Suppose now we take the third case, where we have a number of buyers competing with a number of sellers for a given article, which is a true market. Suppose there is a case of six buyers competing for a barrel of apples, and five sellers, each wishing to sell one barrel. Let us say A will pay any price below \$4.00; B any price below \$3.50; C any price below \$3.00; D any price below \$2.50; E any price below \$2.25; and F will pay any price below \$2.00. Of those who have the apples for sale, suppose that X will accept for a barrel of apples any price above \$1.00; seller Y any price above \$1.50; seller Z any price

above \$2.00; seller W any price above \$2.50; and seller S will accept any price above \$3.00. It will be seen that at \$1.00 there will be six buyers and one seller; at \$1.50 there will be six buyers and one seller; at \$2.00 there will be five buyers and two sellers; at \$2.50 there will be three sellers and three buyers; at \$3.00 two buyers and four sellers; while at \$3.50 there would be five sellers and only one buyer. It will be seen, then, from this statement, that at \$2.50 there will be as many buyers as sellers, and that this number represents a majority of the number of sellers. At or near this point the market will be fixed, because outside buyers and sellers have not influence enough to modify prices. The price may be said to be fixed then somewhere between the actual valuation of the last buyer and the last seller. Now it is evident from this that the entire product thrown upon the market must vary, not so much with the combined force of powers being used in production as the subjective value placed upon these products, which is dependent immediately upon the intensity of man's desires for the goods produced. If we turn our attention to the division of this varying quantity into wages, interest, rent, profits, etc., we must consider each specific case.

If wages be considered, first, what is the wage-earner's share of this varying proportion? It will be determined by the value-creating power as estimated by the market valuation of goods, which is determined by the law of supply and demand in combination with capital and land. If there is no limit to the supply of laborers, while the total amount of wages received may be greater than the total amount of capital in any given production, the former

will be out of proportion to the total number of laborers employed, and the laborers themselves competing with each other for this total amount may reduce wages on account of the law of diminishing returns, down to the minimum of living. That is, the individual laborer must depend primarily upon the valuation placed upon the products of his labor in combination with other forces, and secondarily upon competition with his fellows for his share in the total product. Nevertheless, in normal conditions of business the rate of wages tends to remain somewhat constant, or to improve with improving business and decline with declining business. We can account for this in no other way than from the fact that the presence of a large number of able-bodied men seeking employment, other things being equal, will bring into operation a larger amount of available land and induce a larger amount of capital to seek investment, all of which will require a larger amount of managing ability. Therefore there is a tendency for not only the total amount of wages under normal conditions to remain about the same, but the rate of wages among laborers of the same grade to remain more or less constant. Especially is this true when we consider that of any staple commodity in the market, the market price, though not caused by the cost of production, has a tendency to approximate to this finally.*

Suppose now that the entire product in a given business be one thousand, and that ten units of land yield eighty units of rent, ten units of capital yield one hundred sixty units of interest, ten units of organizing power yield one hundred sixty units of profits, and ten units of labor yield six hundred units of wages. It is evident that the average

* See Thompson, *Theory of Wages*.

wages received by one unit of labor would be sixty. If the population under normal conditions should steadily increase until it was doubled, we might assume that the product would be doubled and we should get two thousand instead of one thousand; that twenty units of land would yield one hundred sixty units of interest; twenty units of capital, three hundred twenty units of interest; twenty units of organizing power, three hundred twenty units of profits; while twenty units of labor would yield just double what they did before, or twelve hundred units of wages, the average wages for each normal unit remaining sixty, and so for each other factor in production. If, on the contrary, we should have a sudden influx of a lower grade of labor, the product would not be doubled under other similar conditions. Suppose now that the product amounts to only eighteen hundred instead of two thousand. In this case fifteen units of land would yield one hundred thirty-five units of rent; fifteen units of capital would yield two hundred seventy units of interest; fifteen units of organizing power two hundred seventy units of profits. The total to wages then would be the difference between the sum of these and eighteen hundred, or eleven hundred twenty-five. But the labor having been doubled, namely, twenty units, the yield here of wages is only fifty-six and one-fourth to each unit of labor. While the entire amount of wages by the influx of cheap labor has been increased, the rate to each individual has been diminished. It might likewise be shown that land, capital, and organizing power receive a diminishing product per unit through the introduction of a large amount of unskilled labor.

This harmonizes the two apparently opposing theories

respecting wages, and makes them complements of each other. (1) That wages of all laborers in similar employments are determined by what the laborer can produce who works on the margin of cultivation or the margin of utilization. Here the laborer receives as wages the total product, and if other laborers receive more than he, he would leave the margin to compete with them and the margin would rise. Hence the equalizing tendency of wages brings them all down to the marginal laborer who works upon the poorest opportunities.

(2) The other view asserts that wages are determined by the standard of life of the laborer. The general rate of wages in any country, class or industry is the standard of living of the most expensive families furnishing a necessary part of the supply of labor in that country, class, or industry. The first is the objective law of wages, the second is the subjective.

Both of these laws are subservient to the law of supply and demand, and the value-creating power of the productive process. The larger the supply, the lower will be the marginal product compared with the labor of producing it. Hence, whatever controls the supply of labor controls the marginal value of its product, which determines the general rate of wages.

It is held by some in this connection that the manager of business, the *entrepreneur*, is the residual claimant, and that the large products of industry are absorbed in profits. But it will be found under free competition that profits are governed as specifically by law as interest, rent, or wages. The gross profits of any business are made up of what we term the replacement of capital, the insurance,

interest, wages of superintendence, and what we may call pure profits. Pure profits are the only kind which should be classified along with pure wages, economic rent, or economic interest. Mr. Walker attempted to show that the profits received by different employers in the same enterprise vary according to the law of rent, and that there are certain industries that, having paid interest, wages of superintendence, insurance, and replaced the principal,—the capital,—there was nothing left for the *entrepreneur*; and for this lowest class of industries there was a constant gradation to the highest, which paid a large return of net profits on account of superior position or management. That there are certain industries that pay no net profits, every one knows; that there are others in the same line that pay small net profits, is evident; while there are still others that pay a large return in profits. It is also evident that unless a manager of any business can pay the expenses of that business he will not continue in it, except it be through a short period of hard times in order to tide over business to better times, or to keep from losses. But under free competition the total amount of profits going to the *entrepreneur* or manager in any given line of industrial operation will depend again upon the demand and supply, or the subjective valuation of the goods produced, by the consumers of those goods; and, secondarily, upon the competition of the number of *entrepreneurs* or managers seeking investment in any given line. But there are so many disturbing elements which modify profits that it has the appearance of being less steady than any other return in business. Thus, in case of a drouth or a failure in business, wages, rent, or interest, is each steadier than profits.

Rights of Property.

The theory of the rights of property is frequently discussed by economists, and it has its place here in distribution, for it has a great influence in this part of economic life. Some economists have held that the right to hold property is based upon labor. According to their ideas, the man should be the owner of the things created by his own exertion. If this theory is put into practice it leads to absolute confusion, for when a man possesses a house, a forest, or a farm, it may not have been his own labor that created any one of these; nor in the goods that fill a store do we find any evidence of the creative power of the owner. From a legal consideration the origin of the right of property is not discussed very fully. Lawyers have taken the right of property as a fact, and the rights of property are secured only through the power of the state. To define property by its attributes, accepting it as a fact, is the extent of the legal conception. Certain persons have advanced the theory of natural rights, holding that property is merely an extension of human personality over external nature. This is a very imperfect conception, for it leads to the assumption that all people are property-owners. The occupation theory ascribed property rights to the one who first obtained possession and whose property was finally recognized by his associates. Doubtless this is the atomic theory of the origin of property, though it has been much extended. The individual and collective ownership of property in the early period points to the idea of occupation as the first recognized title. It is evident that there is some truth in each one of these theories, but that the real test is in the prop-

erty rights as evidenced in the Roman law and the French civil code, and as such is recognized in all modern civil and common law.

The rights of property have much to do with distribution. Certain property is rapidly consumed and the influence of ownership is very light; other property lasts a long time: indeed land itself lasts forever, which makes a vast difference in distribution. Other forms of wealth or property, such as government stocks or bonds, last as long as governments themselves. These highly perpetual classes of goods descend by will or inheritance from one person to another, and the distribution of wealth is thus very much affected. There are persons who are scarcely capable of earning a respectable living single-handed, yet they inherit fortune from a distant relative; the result is a distribution of wealth, and a net product of industry soon begins to flow through rent or interest. To avoid this principle of distribution by means of inheritance, the socialist sought to dispose entirely of inheritance; that is, to abolish it. People who complain bitterly about inequalities of economic distribution are opposed to inheritance, for it tends to perpetuate and aggravate these inequalities.

The exercise of the rights of property may be by a private person or individual, or, through the operation of the law, by a group of individuals in corporate capacity. The rights of property as exercised by corporations vary somewhat from the rights of property of individuals, for in all corporations we find that the majority rule; while the members associate themselves in a group under contract to carry out different kinds of work, they also agree to submit to whatever policy is adopted by the majority or

the policy of the states making the corporate laws. Also, the extension of powers granted these corporations by the states gives them superior rights, such as the right of eminent domain and the income arising therefrom. The ownership of public property is manifest through what are known as political corporations, the general policy of the state being to manage the property for the people at large. Here then we have a variety of ownership which has grown up through custom, and its authority and right need not be questioned. The only facts to be observed are, as to whether there is a definite description of the property, and whether a legal title can be shown to give to it all the rights and privileges of property. The right of property cannot be rationally questioned, although many people who attempt to carry out their socialistic theory and deny the right of interest in order to maintain their position are forced to deny the right of property in their attempt to defend their absurd position.

Monopoly Privileges.

There are however certain monopoly privileges granted by the state, which also interfere very much with the distribution of wealth. These are generally in the form of patent rights, copyrights, trade-marks, and franchises. They are sometimes called artificial monopolies, because they are created by the state. They are not a source of wealth or a means of production, but merely an exclusive control given by the government over a certain enterprise, the entire profits of which may be directed into the hands of one who owns the right or privilege. But as these may be bought and sold, from the personal standpoint of the distribution of wealth they are property rights.

There is another group of monopolies, that arise out of the condition of modern industrial society. These are sometimes called natural monopolies, because the monopoly power arises out of economic conditions; although the line of division is not strongly marked between them and artificial monopolies, for indeed every natural monopoly receives the sanction of the government by the means of a franchise which makes it rely in part upon the state for its existence. Land, in so far as it is a monopoly, belongs to this class, and such great enterprises as railways, water-works, tramways, gas-works, telegraphs, etc., are classified in this group. Also, the modern manufacturing industries which have grown into gigantic corporations and trusts have derived such a momentum of power and mastery over conditions as to be practically monopolies. Summing up a review of natural and artificial monopolies, Mr. J. R. Commons, in his book on *The Distribution of Wealth*, enumerates the following propositions:

1. They are not capital, but exclusive privileges of selling goods and services. This privilege is of paramount importance in modern society, where goods are produced, not for direct consumption by the producers, but for sale and profit.

2. They furnish opportunities for the profitable investment of labor and capital.

3. Their value consists in the power they give to limit the supply of their produce relatively to the demand for it.

4. They may be united in more or less complicated combinations in single enterprises. A railway, for example, may possess monopoly advantages due to patents, franchises, land, and good-will.

5. They are, like capital, the objects of the rights of property, and may therefore be subject to full and partial ownership. In the case of artificial monopolies, the government creates the monopoly privilege, and then assigns it to individuals, who may transfer it by deed or otherwise. But in the case of natural monopolies, the monopoly privilege arises simply by virtue of private property in a certain peculiar kind of material object.

6. Good-will is partly a natural and partly an artificial monopoly. It *originates* in the fact of private property in material objects, such as a retail store or manufacturing enterprise. In order that this may be done, the law must make it an artificial monopoly. It does this, not by formally creating a monopoly privilege, but by enforcing the private contract of the seller not to engage in the same occupation, according to the terms of the contract.

7. The public, as well as individuals, may be the owner of land, capital, and monopoly privileges. The state, in its various divisions, is a legal person, and as such is a subject of the same rights as private persons. This includes full ownership, which may be the ownership simply of material objects, as a postoffice building; or the ownership of natural or legal monopoly, such as water-works, streets, and the postoffice business; *i. e.*, the exclusive right to supply water, maintain streets, and carry the mails.

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CHAPTER II.

RENT AS A FACTOR IN DISTRIBUTION.

Rent in General.

Rent is called the normal return of land. Ricardo asserted that it arose from the natural and indestructible qualities of the soil; and this definition is quite correct fundamentally, for rent arises from the use of the ground alone. As Ely says, "The rent of land is the annual return of land itself"; or, as Walker says, "Rent is the surplus of the crop above the cost of cultivation on the least productive lands contributing to the supply of the market." Marshall says: "The rent of a piece of land is the excess of its produce over the produce of an adjacent piece of land which is cultivated with an equal amount of capital, and which would not be cultivated at all if rent were demanded for it." And Marshall continues to say that "the economic rent of a piece of land is found by subtracting from the value of the annual produce an amount sufficient to return the former outlay with profits." These are only different methods of expressing the nature of rent. Andrews extends the principle of rent to general monopoly, and says: "Rent in its broadest sense is any kind of gain arising from monopoly, whether in land, capital, or talent-income, which falls to any productive agency simply because of its rarity."

Contract Rent and Economic Rent.

It is necessary to distinguish between ordinary contract or market rent and economic rent. A person enters

into a contract to pay the owner of land a certain fixed annual sum for the use of the land. For this sum the tenant has the use of the land, buildings, ground on which they stand, and all improvements. The sum which he pays is composed of two chief elements,—one the payment for the use of capital invested in improvements, and the other for the use of land itself. A piece of unimproved property adjoining, of the same grade as the improved land, rents for much less, which is probably the normal rent. However, it may be possible that in making the contract,—on account of ignorance, or a sudden excessive demand for land, or the pressure of custom in charging high rents,—the individual may have paid too much, or more than the real rent of the land alone, known as economic rent in the principal works of political economy.

A very good illustration of this economic rent is seen in cities such as Baltimore and Philadelphia, where the rent of the land is different from the rent of the house which stands on it. A person may own the house but not own the land, and thus pay rent for the land on which his house stands,—which would be considered as economic rent.

Cause of Rent.

Rent arises from two fundamental conditions of land: first, that of fertility; and second, that of position or location. These two usually work in conjunction, and the difference of position more frequently than the difference of fertility represents the chief factor in determining rent in towns and cities; while in rural districts fertility of soil is a more important factor.* Lands that are favorably located yield a larger return than those less favor-

* In case of ground rents of town lots fertility does not enter into the cause of rent, it being determined by position alone.

ably situated, and lands having a fertile soil which yields a large product, yield a higher rent than poorer land. As the first use of the soil is tillage, it would appear that the difference in fertility would be the first cause; but as location respecting the market lessens cost of transportation, the position of farm lands has much to do with their market rent. In determining rent, Walker insists on the consideration of fertility as the real cause of rent.

Manner in which Rent Arises.

Suppose there are several tracts of land in the same market, and that there is private ownership of land and competition in its use. Eliminate all personal influences save the desire to obtain the largest return for a given sacrifice of capital and labor on the part of both landlord and tenant. Of the tracts of land A, B, C, and D, which are enumerated in the order of their fertility, D yields just enough product to pay for the cost of cultivation; that is, the wages of labor, interest on capital invested, and remuneration for managing ability. Let us fix this yield at ten bushels per acre. It costs no more to cultivate the tract C of more fertile soil than the tract D, hence the expenses per acre will be the same. Suppose now that C yields fifteen bushels per acre, it is evident that the five bushels represent a clear gain on account of extra fertility. So, if B yields twenty and A twenty-five, it is evident that the rent is respectively ten and fifteen bushels per acre. Should the prices of products rise so as to make an increased demand, then other and less fertile lands than D may be brought into use to supply the market, and rent will appear in the tract D, for it will

take fewer bushels to pay the cost of cultivation. On the contrary, if prices should fall to any great extent, C will no longer pay rent, but go out of cultivation unless it can be used for some other purpose to sufficient advantage to pay rent or cost of service. (See diagram H, fig. 1.)

DIAGRAM H.

Figure 1.

25 bu.	20 bu.	15 bu.	10 bu.
A	B	C	D
Rent, 15 bu.	Rent, 10 bu.	Rent, 5 bu.	

Figure 2.

75 bu.
E

Figure 3.

1
2
3
4

Should there be discovered a large tract of fertile land E, which would yield a return equal to C, D would go out of cultivation if the fertile tracts could supply the markets, otherwise D would be worked at cost. The opening up of the fertile lands of the Mississippi valley and the far West caused less fertile lands in New England to go out of cultivation, or to be used for pasturage, in which they paid expenses or else yielded a small rent. (See diagram H, fig. 2.)

Difference in the Fertility of Soil.

As rent rises chiefly from the difference of the fertility of soil, it is evident wherever land is in cultivation. Thus, suppose a farmer has a tract of four hundred acres of land which is divided into four different tracts of an equal fertility. The most fertile lands are cultivated first. If the returns from agriculture are sufficient, the lands in the second grade of fertility will be cultivated; and if prices continue to rise, the farmer may continue to increase the area of cultivation until the entire tract is cultivated. Here, as above, rent rises in the first instance out of the differences of fertility of the land.

Favorable Location.

But if land were all of the same degree of fertility, its difference in location would have a tendency to develop rent. Now it is impossible to equalize the location of land, whether it be agricultural land or city property, for the desirability of location will always be observed, even in the taking up of new lands in a large valley. Usually, the first located has a value superior to the second, not only on account of fertility, but also of loca-

tion. The ground rent which arises in cities is entirely dependent upon location. On some streets we find rent reaching fabulous prices, while on others it is much lower. The farther business property is from the busy center of the city, the cheaper the rent, unless it should be taken from valuable residence property; and residence property varies in value likewise as it recedes from the desirable and fashionable residence localities.

Limited Returns to Agriculture.

Intensive agriculture tends to retard the process of taking up new lands, and were it not for the fact that land has not only decreasing but limited returns, a small area would tend to supply all the demand for agricultural products; but there is a limit to which agriculture can be successfully continued on any tract of land. Indeed, there is a point to be reached when the application of labor and capital will yield no return whatever. The tendency to take up new lands does not always proceed with regularity. In the first place, lands are not taken up always on account of their immediate economic yield, but rather are secured as an investment. Men enter a new territory far from the market and take up lands which would not yield any rent at all or even pay for the cultivation, obtaining only a bare subsistence while cultivation is carried on, with a prospect in the rise of the price of land somewhat later. This is purely a business investment, and nearly all the lands of the West have been secured in this way. It is also true that when people have once established themselves on lands they do not abandon them for more fertile lands, because they have invested capital in improvements and they hold these lands even after they pay no rent.

Margin of Cultivation.

That land which will just pay the cost of cultivation and no more is said to be on the margin of cultivation. (See diagram H.) Lands that are less fertile or less favorably situated are said to be below the margin of cultivation, and will not be occupied. That is, land that will pay wages for cultivation, profits for management and interest on capital invested will be occupied and cultivated, while land that fails to yield this return will not be cultivated. It sometimes happens, however, that land which will not be used for agricultural purposes may be used for other purposes and thus yield a rent, or at least pay for the cost of cultivation. It also happens that land is occupied and cultivated by persons who spend partial time upon it, using the remainder for some other purpose. In such cases, land that would pay no rent for agriculture might yield a return for pasturage.

Prices and Rent.

An increase in prices, if permanent and constant, will tend to enlarge the agricultural area; and this has a tendency to increase rent, for, as it costs the same to cultivate an acre of poor land as that of rich land, the lower the margin of cultivation falls the higher will be the rent, because the annual return on the fertile lands is much increased, and the difference in the cost of cultivating the poorest land occupied and the returns of the most fertile, is greatly increased. Consequently, high prices as well as favorable location increase rent, simply because high prices create a demand for land. The opposite is true in the case of fall of prices. A long, persistent fall in prices will tend to diminish the demand for land,

which will cause its rent to fall. This must be taken as a general law which is interfered with by various conditions of investment, for land will be held for year after year when local interferences cause it to yield no rent or indeed to fall below the margin of cultivation, simply on account of a prospective yield. In this way business is tided over in difficult times until it pays. This, however, does not interfere with the law of rent, for indeed were there no margin of cultivation except in theory, the fact of the relative fertility of land and the difference in the desirability of location would be sufficient to establish the law of rent.

Rent Does Not Enter into the Cost of Production.

It is assumed that the market price of an article is not dependent upon the rent that is paid, but rather that rent is determined by the market price. This is logically the correct view to take. High rents do not give us high prices, but high prices make high rents. It might be well to inquire carefully into the real nature of this statement, to see what is meant. When Mr. Ricardo enunciated this doctrine he talked about corn, as if all kinds of produce whatsoever had been reduced to one kind. If this could be true it would be actually certain that high prices would give us high rent universally, and that high rents have nothing to do with high prices. However, there is an indirect way in which high rents may make high prices. Suppose there be a given number of acres of wheat land and a given number of acres of corn land. If the price of wheat should rise until the wheat land was not sufficient to supply the demands, they might encroach upon the corn lands and thus

create a deficiency in the corn crop,—for wheat would raise the price of corn. That is, the high rent of land for wheat might cause high prices for corn. To find out just what is meant by this in a practical sense, let us take the case of the mineral springs. (See Marshall's Principles of Economics, Bk. VI, ch. 2.) Let us suppose of a series of mineral springs that they are all owned by different individuals; that they furnish a natural mineral water which finds a market, and for which there is no available substitute. There is a free competition in both buying and selling. Suppose that the supply that is drawn from each of them can be increased indefinitely by pumping, but that the expense of this increases in proportion to the additional supplies to be obtained by this process. The owner of each spring will go on increasing his production until the price of water no longer covers more than the expense of an additional supply. That is, the last gallon of water which the expenditure enables him to raise when the amount raised by the whole number of springs is just sufficient to meet the market, will be produced at an equilibrium price which will just pay for its own production. The rental value of each spring now will be the excess which this price affords over the expenses of working it. That is, demand and supply here as before regulate the price, but will not enter into the expenses of production. But suppose, now, that the land occupied by one of these springs is more desirable for a building site, and some person should build upon it and thus decrease the supply of water. Immediately, as the water-supply is contracted, the demand for the water is relatively greater than the supply, and the price rises. Consequently

the high rent of the ground used for some other purpose increases the price of the commodity in the market. With reference to agricultural products taken as a whole, the law that rent does not enter into the cost of production obtains. But, if there be a certain amount of land which can be used for the purpose of raising wheat and a certain amount that can be used for corn, suppose an increased demand for corn should raise the price of that commodity so that it would encroach upon the wheat land, taking a part of it; immediately now, supposing the demand for wheat be constant, the demand will be greater than the supply, and the price will rise on account of the excessive rent arising from the corn land, which has therefore encroached upon the wheat land.

Rent and Free Land.

The principles of rent as enunciated above represent the result of free land. So long as there are lands to be taken up, the principle of rent is easily determined. There must be a time, however, when all of the free land will be taken which, under any ordinary circumstances, can be used at all. As the margin of cultivation falls under free lands, rent absorbs more and more of the entire product; and as the rent increases, the margin of free productivity continues to decrease, because lands of lower grade can be used. When landlordism prevails and the owner of the land fails to cultivate, but lets it out to tenants, the land will yield no rent in the lowest scale of production. There is a continual absorption of the entire product until rent meets wages, and then there is a check. The rent of land arises whether land is free or unfree; there is no difference in this respect so far as the principle of rent is concerned.

Economic Significance of Rent.

Rent must always be allowed for in any financial calculation whatever. The constant increase in rent in proportion to the returns from agriculture has alarmed some people, who seem to believe that rent eventually will absorb the entire product. Fortunately, in our own country sixty-five per cent. of the farms are still owned by those who work them, and whatever increment of rent arises goes to the owner.

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CHAPTER III.

WAGES AS A FACTOR IN DISTRIBUTION.

Labor the Cause of Wages.

When we speak of wages in the scientific sense, we mean the earnings of common labor; all high fees and salaries should be excluded. The rewards earned by peculiar talents, education, or training, are sometimes classified along with profits. However, the line must not be drawn too closely when we consider the general subject of wages, for in a general sense it is payment for services rendered. The salary of a railroad president at \$25,000 a year is a return for services. But the wages question scientifically considered should not include such a salary as wages. But labor is the cause of wages. The payment for the services rendered by the combined action of body and brains is wages. They are earned by the laborer. He earns his own wages each day he labors, and when he ceases to do this he is not employed. Hence it is sometimes said that the laborer pays his own wages.

Pure Wages Distinguished from Gross Wages.

The return to common labor is called pure wages, which should be distinguished from gross wages, which might include extra rewards and services.

Real and Nominal Wages.

Economic wages are real wages, not nominal. By real wages is meant the purchasing power of a day's labor; by nominal wages the amount received in currency.

A man may be receiving two dollars a day in one country and for the same service a man receives one dollar in another, yet they may have the same real wages; for it is possible that the man who receives a dollar a day buys the same articles for a dollar that would cost the other man two dollars. The real wages in different countries do not vary so much as the nominal wages, hence people in making comparisons of wages frequently omit to properly distinguish between real and nominal wages.

Wage-Fund Theory.

Some of the older economists held that there was a certain sum, a part of capital, set aside for the payment of wages, and when this sum was exhausted no more laborers could be hired until it was replaced. This wage fund was continually growing as economic society and wealth accumulated, and the number of laborers that might be employed was limited by this fund. Accepting this theory, it was an easy manner to determine the rate of wages by simply dividing the amount of the wage fund by the number of laborers. This method would set a limit upon the rate of wages to be paid. Mr. Mill advocated this doctrine in his earlier years, but abandoned it somewhat later. The fact is that the source of wages is the earnings of the wage-earner, and the wages come out of the product which he makes every day. Instead of giving him his share of the product at night or at the close of the week, the employer advances in the form of money the laborer's wages each day or each week. Of course in the wages system the rate is determined by the employer and laborer by contract before the labor begins. But when the laborer's earnings will no longer pay for his wages he

will cease to be employed. There is a point at which the wage-fund theory and the labor theory practically coincide, for wages are limited by capital. The amount of capital seeking investment by way of buildings, machinery, etc., determines the number of laborers to be employed, and hence fixes the rate of wages. If capital is not available, laborers will not be employed. On the other hand, if laborers are thrown on the market they will tend to decrease wages by competition, and the capital under such circumstances indirectly determines the rate. Now the wage-fund theory supposes that a certain sum is set apart for the payment of wages, and that no more laborers can be employed until this is replaced. If we consider this replacement working at a rapid rate, it simply asserts that capital limits wages. However, there is a wide distinction in theory, for in the economic sense wages must come out of the earnings of labor instead of being paid out of the surplus of capital, which is used for other purposes. The point of view is entirely different, and the different results are of great importance in the theory of wages.

Determination of the Rate of Wages.

There are various theories of wages. Some workmen and certain philosophers are always demanding the whole of the product for the laborer. They hold that the men who create the goods have the use of them. They imagine that gains are obtained by capital in an unjust way, but are in error because they fail to recognize that capital performs any service whatever. Those laborers who attempt to break down the wage system by methods of coöperation are the first to learn that capital is necessary to carry on any business whatever. Generally speaking,

the rate of wages is determined by supply and demand. The more laborers in the market, the demand remaining the same, the lower will wages be. This is the general theory underlying the whole system of wages, although it is true that wages may be reduced to a more specific theory, which will be determined hereafter.

Residual-Claimant Theory.

One of the commonest theories for determining the rate of wages is generally known as the residual-claimant theory. It has been advocated by Professor Walker and other able economists. It holds that the net product of industry divides itself into rent, profits, wages, and interest. That when rent, profits and interest are satisfied, wages take what is left. When asked if this is true why the amount of wages is so small, it is replied that by some power of capital or managing ability a large proportion of income has been directed away from its natural source which would otherwise have fallen naturally to labor. In reality there is no residual claimant in distribution. Wages are a variable proportion of a variable product, and so for rent and interest,—both being variable proportions of variable products. While the net product is distributed between rent, wages, interest, and profits, the proportion upon which it is divided does not depend upon the residual-claimant theory, but rather upon the value-creating power of each factor in production, and this throws it all in the province of supply and demand.

Iron Law of Wages.

In attempting to ascertain whether there is a natural law of wages, Turgot announced that “in every kind of labor the workman’s wages must fall to a level solely de-

terminated by the necessities of existence." J. B. Say and Ricardo somewhat later used almost the same words; and the socialists, taking up the idea, expanded and emphasized it. This is what is known as the iron law of wages, or, as it is sometimes called, the brass law. It means that wages must be regulated by the value that is absolutely necessary for the support of the laborer and his family. There must be sufficient to give food, shelter, and protection; to keep up repairs, so to speak; and to replace the laborer with another when he wears out. This means that the Chinaman living upon rice and with small amount of clothing and little protection receives wages accordingly, and that the American laborer who reduces his style of life to the same condition must likewise live upon a few cents a day. The law as a law is not true, though it does show a tendency in determining the rate of wages. If we take it that the workman's wages will never rise above what he absolutely requires to live upon, the facts in the case overthrow it. For different kinds of work receive different wages; also, different wages for the same work are paid in different countries. But, says one, this rate of living is taken according to the standard of life that it is necessary for him to maintain. If this be true, then the law of wages is not such a terrible thing as it appears to be. If it means that laborers are ground down to the bare necessities of human existence, and that the normal rate of wages is just sufficient to sustain life and reproduce their kind under the most favorable circumstance, the law is not true. But in a broad sense the theory is more or less true, for wages must sustain life or work ceases. On the other hand, there is a point beyond which wages cannot rise without

discouraging business operations. Between these two points, the upper and the lower, are developed the real scientific laws of wages.

Scientific Law of Wages.

If we consider the various industries in every line of work, it will be seen that the natural or normal rate of wages is determined by the lowest grade of industry in any given line. As it has been stated, "general wages tend to equal the last actual product by the last laborer that is added to the social working force." This is established on the principle that when labor will pay for itself, it will be employed; if not, no labor will be employed. In this respect it has a resemblance to the law of rent and profits. It would not be proper to insist that the normal rate of wages is caused by this business on the margin of profits, but that the natural or normal rate of wages is indicated at this point. It is merely a process of excluding more complex elements and returning to the simplest phase of industry in order to allow wages to stand alone. If this indicates the normal rate of wages, other more prosperous industries, or those demanding greater skill, might return a larger amount in the form of wages. The normal rate of wages could be determined in no other way, although competition in the labor market brings wages to a general level in different groups.

Competing Groups.

There are everywhere low-pressure and high-pressure competitive groups of labor. Thus, in the iron industry we find competition of groups of miners, smelters, puddlers, etc. In the machine-shop there are competitive

groups of men in specialized occupations. So in the woolen industry,—the general competition of all laborers employed and a special competition among those especially prepared for a given service. Also, it appears that in the division of labor originally, these groups were formed because each laborer had a special occupation. As the division of labor becomes excessive, we find the tendency for labor to become more mobile. That is, as it takes but little time for a person to learn one thing, he may pass more readily from one industry to another; thus the barriers between industries appear to be broken down: yet there are other things that interfere with the mobility of labor. The specialization, requiring greater skill before confidence is established, and also the fact that through labor unions and methods of business, employers are not willing to take up with persons who have left one industry to enter another, make it quite difficult to render labor mobile. Should a scarcity of labor appear, then it would be easier for labor to shift from one occupation to another. The result of competition in the high-pressure group is to turn the surplus labor of some groups into others and to turn the surplus of all groups into the unskilled labor group, which makes up the rank and file of the unemployed. Wages thus are subject to a general law of competition of all laborers, and a special law of special groups.

Influence of Labor Organizations on Wages.

The influence of labor organizations on wages is a disputed point among economic writers. That labor organizations have had at least a general influence on wages, cannot be denied. In so far as they have been successful in limiting the supply of labor in a given field, they have suc-

ceeded in raising the rate of wages. In so far as they have created monopoly of labor, they have developed a monopoly of wages. Yet it will be found that their greatest influence has been in agitation, in creating a demand for higher wages, and in strikes which have resulted in forcing employers to pay a fair rate or what the business would allow. While fundamentally the great law of supply and demand must regulate general wages, it cannot be denied that the influence of labor organizations has done considerable in keeping up the rate of wages. Yet it must be conceded while they have advanced wages, they have contributed somewhat to the army of the unemployed by making it unprofitable to carry on certain industries at the high wages demanded. Their influence on wages from the direct standpoint of monopoly has been of a somewhat temporary nature; while their influence by creating a higher standard of life and by educating public sentiment through agitation and strikes has tended to hold up wages.

Business Sense and Wages.

An important cause of the increase in wages has been the business sense of employers. For instance, in the care of horses two theories have been advocated, viz.: that to work a horse very hard and get all you can out of him in a short time is economy; to feed him well, care for him properly and make him last longer is best economy. The same theories were advocated in regard to slave labor. If horses, mules and slaves yield a larger return by excessive toil, which shortens life and gradually lessens labor-power, it is not so true of labor. A laborer well fed and well cared for will do more work and better

work for the employer than one who is poorly fed and poorly cared for. Hence it is best for the employer to look after the welfare of his laborers, and it is not best for the employer to have a grinding rate of wages for the laborer. Many men have seen this, and have advanced their own interest by taking good care of the laborers, making them capable of earning a high rate of wages, keeping them contented and happy, so that they are willing to earn the wages and to interest themselves in their employer's work; and finally, by paying a high rate of wages. Thus we find that business sense has been looking out for the laborer, and has tended to keep up wholesome sentiment in favor of higher wages.

Philanthropy and Wages.

Sentiment has much to do with economic relations, and a well-administered philanthropy has a tendency to create an interest in the laboring population and promote advocacy of higher wages. Yet it will be found that all permanent movements in this respect are based upon business relations and rest upon a business basis. The agitation for higher wages in behalf of labor, although resting on an economic basis, has its influence in raising wages.

Eight-Hour Day and Its Effect on Wages.

It is thought by many laborers that if the eight-hour day should obtain, wages would remain the same for shorter hours. Others hold that it would give means for employment to a large number of laborers. In fact, the eight-hour day in some industries would earn as high wages as the ten, while in others it would fall much short. The decrease in the number of hours of labor in general would yield a relatively large return of wages per hour and a

smaller return per day. Possibly with the general adjustments of industry, wages would remain the same for an eight-hour day as for a ten. Wherever the day has been shortened to labor the appalling effects which are generally pointed out in prospect have never appeared. The increase in wages has kept its pace notwithstanding the decrease in hours.

Gradual Increase in Wages.

One of the most striking phases of modern economic life is the constant increase in wages. This of course has varied on account of local disturbances and periods of depression, while as a rule there has been a persistent rise. In looking over the advance in wages in the United States during the past fifty years, it will be found that the rate of wages was very low when we had a high inflation of currency. This was caused by the difference between nominal and real wages. It is an illustration of the principle that in all movements of money involving the rise or fall of prices, wages are the first to be affected in the fall and the last to be affected in the rise. Therefore a sudden and radical change in the currency has a significant effect on the rate of wages.

Improvement of Wages by Legislation.

It used to be customary in England for the justice of the peace to regulate wages for a given period. Indeed, it was a strong theory in the early modern period that fair wages should be established by law rather than to be trusted to competition and demand. But this custom, which was arbitrary and useless, finally gave way to free competition, until in modern times no attempt has been made to regulate wages in industry by legislation. Yet

the protective power of legislation in creating better sanitary condition, in insisting that the laborer has a right in the product, and in guaranteeing his wages, has had much to do with promoting the rights of the laborer, and this has an indirect influence on wages. This is the only real benefit that legislation can have to advance the rate of wages.

Economic Signification of Wages.

The discussion of wages belongs to economic distribution. It is very important in the general economic effect of society. Well-paid laborers are great consumers, and consumption creates a demand for goods. A body of well-fed, well-paid laborers is in a measure a test of the prosperity of a country, and to a certain extent the index of its civilization. This latter is especially true if the laborers are honest, reliable, and of good physical and moral health.

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CHAPTER IV.

INTEREST AS A FACTOR IN DISTRIBUTION.

Nature of Interest.

Income that comes to capital is called interest. It is sometimes used to designate the entire yield of capital before current expenses, risks and repairs are taken out, when it is then called gross interest. Net interest is the result after these contingent expenses have been deducted, and is the true income on capital itself.

Economic Interest and Loan Interest.

We should also distinguish between economic or natural interest and contract interest. Economic interest is actual return to capital on account of its value-creating power in the process of production. Loan interest represents simply contract interest, and is the amount paid to the lender by the borrower for the use of capital. In the ordinary treatment of interest, loan interest is considered rather than economic interest. The loan interest may be greater than economic interest, but in the long run it tends to approximate it when the two elements of risk and commission are left out. The chief difference between economic interest and loan interest lies in the variation in loan interest caused by the favorable or unfavorable condition of the loan. Thus, current rates for short loans generally vary greatly from current rates for long loans. But there is a normal rate to which the variations of current rates usually tend in a community, which comes very nearly

the economic interest,—just as contract wages or contract rent tends to conform to economic wages and economic rent, respectively. The essential fact in interest does not necessitate a loan, for interest arises from the use of capital even when it is used by its owner. The man who engages in business for himself and allows in his accounts a record of the interest on his own capital, not only observes a good business principle, but also approximates an economic truth. He usually records the current rate, but recognizes the income that naturally arises from capital.

Development of Theories of Interest.

There have been very many theories respecting interest advanced by the people of ancient time, as well as by different economists. This fact, however, does not interfere with a true theory of interest. All interest was called usury by the people of the middle ages. And indeed the Bible calls interest usury, and speaks decidedly against the man who takes usury. When the Hebrew writers urged against the charge of interest, the economic life was entirely different from what it is at the present day. Capital was then loaned for the purpose of relieving distress, without thought of putting it in business for the purpose of earning a large return to the borrower. Aristotle held that money was a barren thing; that it could not beget money, and therefore that it was wrong to charge interest. In the first place, his mistake was in supposing interest was charged on money instead of on capital, of which money was only a single form. In the second place, the modern processes of economic production had not yet appeared.

Aristotle says that the most hateful of all ways of

earning money is usury, which makes a gain out of the money itself without the natural use of it. "For money," he says, "was intended to be used in exchange, but not to increase interest. And this term usury, which means the birth of money from money, is applied to the breeding of money because the offspring resembles the parent. Wherefore, of all modes of making money this is the most unnatural." But Aristotle with all of his wisdom and learning could have known nothing of the industrial revolution, of division of labor in its extended form, of power manufacture and the consequent modern uses of capital, and therefore could have well assumed that a thing might be quite unnatural in his day which is quite natural in our day. Although he was the most learned of the ancients, he could not be expected to have anticipated a science which had not yet been created; nor could other pagan writers, who held that money is by nature incapable of bearing fruits, that the lender's gain therefore cannot come from the peculiar power of money, and that it can only come from a defrauding of the borrower, know of future development of industry through capital. But Athens, and Rome herself, as civilization grew more complex, found the charging of interest to be an inevitable result of complexity of business relations, notwithstanding the learning of Aristotle.

In the middle ages the writers and ecclesiastics treated the subject more thoroughly; and at the close of this period, when political economy was gradually developing, many of them finally acknowledged the right of interest to exist,—a conclusion reached through their philosophy,

for they counted the practices of the world all wrong and could not learn of them. The old canonists of the twelfth and subsequent centuries tried to argue against the payment of interest as an abhorrent thing. Thus Gonzalez Tellez wrote: "So then as money breeds no money, it is contrary to nature to take anything beyond the sum lent, and it may with propriety be said that it is taken from industry than from money, for money does not breed, as Aristotle has related."

Covarruvias, another of the canonists, wrote: "The fourth ground is that money brings forth no fruit itself, nor gives birth to anything. On this account it is inadmissible and unfair to take anything over and above the lent sum for the use of the same, since this is not so much taken from money, which brings forth no fruit, as from the industry of another."

And again Vaconius Vacuna: "Therefore he who gets fruit from that money, whether it be pieces of money or anything else, gets it from a thing which does not belong to him, and it is accordingly all the same as if he were to steal it."

Thomas Aquinas considered the element of time in interest, and held that he who charged interest charged for time, which belonged alike to all, and a thing of which no one could make a monopoly without robbery.

There were four points in the doctrine of the canonists, viz.:

1. Loan interest is simply an income which the lender draws by fraud or force from the borrower.
2. The lender is paid in interest for fruit which barren money cannot bear.
3. The lender sells a use which does not exist, or

which in reality belongs to the borrower. 4. The lender sells time, which belongs to the borrower just as much as it does to the lender and to all men. In every sense interest appears as a "parasitic profit extorted or filched from the defrauded borrower." These illogical and unjust arguments appear very crude to us to-day, who have so long been accustomed to the payment of interest. Yet they serve to illustrate the truth that former ages had their vagaries and visionary theories as well as this, considered in the light of dogmatic teaching. During the sixteenth and down through the eighteenth centuries the arguments against interest gradually subsided. The world went on practicing the use of interest without taking heed to the sayings of the philosophers. Sometimes in recent years people revive the old controversy in a new way, apparently not conscious of the exploded theories of former days.

Among modern economists there have been a variety of views set forth, some of them of entirely opposite character. Thus, James Mill and McCulloch held that interest was nothing but the wages of labor stored up in capital, and as all capital was originally formed of labor, that the interest on the capital corresponded to the wages of labor. The explanation of the origin of capital and its service in production would indicate that this is not only a confusion of terms, but also hints at that which is not true. It was held by Turgot and supported by Henry George, that interest derived its reason to be on account of live capital which brought forth a return without accompanying labor. Thus, land, animals, bees and wine would yield a return without labor. From this as a starting-point, they held that other capital should have

the same return. This traces interest to a natural source. More recently Menger, J. B. Say and Hermann held that capital brought forth interest because of its especially favorable investment, which yielded a return over and above its normal productivity. Other writers have tried to show that capital has some peculiar power of increasing so that interest will grow out of it under all circumstances; but these people overlook the idea of time, of risk, and of abstinence or the special diversion of capital into certain channels. While abstinence is not the cause of interest, it is indispensable to the formation of interest, because through it capital is placed in a condition of service.

Another very erroneous idea is that interest is robbery; that the product ought all to go to labor, but a robber seizes that which belongs rightly to others and calls it interest. These writers, among whom are Marx and Rodbertus, hold that there is no rational cause for interest. If told that because a man owns property he has a right to pay for the same, the followers of these writers have asserted that man has no right to private property, and they cry out with Proudhon, that "property is robbery." But they claim if labor had received its share of the net earnings there would be no capital accumulated in the hands of those who do not labor. But this does not say that the capital would not have its existence, and that the laborers who would own it could not charge interest or at least have a right to it. In fact, this is the real case, for the laborers of this life are the capitalists; they are the ones who save and who obtain a return from their savings. In reality, granting two points,—that a man has the right of property and that the laborer has the right of wages,—I have no more right to ask a man to allow me

to use his capital without a return than I have to ask him to work for me without a return in wages. How absurd for me to say to a man, "You are stronger than I, and as I have work to be done which will greatly benefit me, if you will come to work for me I shall have a better living, a finer house and more leisure; and for this service I propose to pay you nothing, because you have no right to charge me for such services." Would it not be equally absurd for me to say, "You have a thousand dollars and I have none; let me take your money, as I know a profitable investment where I can make a large return in a short time"? And you say, "What will you give me for the use of this money?" I say, "Nothing; you do not need it and I do." How absurd such a proposition would be!

Interest a Premium on Exchange.

In his admirable work on Capital and Interest, Boehm-Bawerk gives a careful review of all theories, and finally advances his own, which seems to throw much light upon the subject. He holds that a loan is an exchange of present goods against future goods. On account of the ordinary desires of man to value present things more than future ones, a lump of capital is worth more to-day than its future valuation for a year from to-day. Hence if present commodities command a premium over future ones, it is to be observed that a sum of present wealth is to be had only at the price of a greater one in future. This premium is the net interest. This places all loans on a purely exchange basis, and makes interest the difference in the price of a commodity of to-day from the same commodity a year from to-day. It is a simple business way of estimating interest, and disposes effectually of

the theories which have been advanced to show that money is barren, or that money is fruitful in itself, or that interest is robbery. That is, you have a horse which I ask you to loan me for a year. To-day the horse is worth \$100. But I will not agree to give you a hundred dollars for the horse a year from to-day, because, supposing that he will be in good condition then as now, a year's service has gone. Hence if I borrow the horse for a year I must return something besides the horse to make an even trade. It is the same with the hundred dollars being worth more money to-day than it will be a year from to-day,—I agree to pay that difference, which is \$8 or \$6, as the case may be. This is called interest, and may be paid now or a year from now. This interest is usually calculated in a given rate on the principal, which is sometimes misleading.

Rate on Loans.

The rate on loans varies slightly during a long period of time. There is a steady decline in interest as society becomes more stable and business investments more permanent. But the rates vary in different countries as well. In England interest is lower than in Boston, and it is lower in Boston than in Kansas City. The chief causes of this are, first, the amount of available capital seeking employment in older countries; and, second, the element of risk. People do not like to take the risk of loaning money in new and unsettled countries, or in lands far away from home. In the former case they will do so if the interest is large enough to tempt them to take the risk; in the latter case, if interest is sufficient to cover risks and agents' commissions, they may make loans. I said that the rate of interest continually decreases, although

the process is a slow one if we exclude the element of risk, which may cause a sudden change in the interest at any time. Thus, in early times in Kansas, money was loaned at the rate of eighteen per cent., and it was not long ago that current rates were twelve and thirteen per cent. Now, the usual rate is eight per cent. at banks, while first-mortgage loans are six and seven per cent. in eastern Kansas, and four-per-cent. school bonds sell readily at a premium; while banks charge ten per cent. on short-time loans. In 1876 in California one and one-half and two per cent. per month were common charges in many parts of the State, while one per cent. per month was a fair average in San Francisco. The great cause of this decline is in the fact that large amounts of capital have accumulated in London and in the large cities of the eastern part of our nation, which are seeking investment. And on the other hand, the West, having become more stable than formerly there is less risk engendered. The yearly average of interest in London for the last twenty years has been less than four per cent.; it exceeded that amount but one year. In 1888 the British debt was funded at two and three-fourths and two and one-half per cent., and it is not uncommon to charge only two and two and one-half per cent. for money in London. People are glad to get four to five per cent. in New England on gilt-edged security. It is difficult to loan money at five and one-half per cent. in Kansas City on first-class security. Other things being equal, the rate of interest will depend on the amount of available capital seeking employment; or in other words, upon the demand and supply. But other things are not always equal. For example, in times of panic and unsettled business there

may be plenty of money with interest low, or at certain stages there may be plenty of money and interest high; but where a large amount of money seeks honest and legitimate investment it must have an effect in lowering interest. The rate of interest will vary, secondarily, according to the desire of people to enter new business, and it is also somewhat dependent upon the character of the borrowing community. If the latter has a record of paying debts promptly and without failure, more favorable terms of interest may be had; while if there are doubts as to its solvency, the rates of interest are higher.

Effect of Cheap Money on Interest.

Some people, and even some economic writers, have been mistaken as to the effect of a cheaper money on interest. If the purchasing power of money could be reduced one-half it would not cheapen interest, as an inflated currency has no perceptible influence on interest. For if the interest is paid by a given per cent., the same proportion of the cheap money will go to pay the debt. In another way, however, inflation frequently leads to speculation, and this brings on a higher rate of interest. If, however, a debt is contracted in one form of money and the interest made payable in another, dearer form of money, then interest will be increased directly by inflation.

Legislation and Interest.

One of the most difficult points to consider in relation to interest is the result of legislation on interest. Can a single State reduce the rate of interest by passing a law to reduce it below the current commercial rate? The general tendency of all legislation to reduce interest is to make it more difficult for the borrower. However, there

are some things to be observed in connection with this general assertion. So long as a State can by the power of legislation change the custom or habits of the people, there is some governmental power in the reduction of interest. Suppose the current rate based upon the supply and demand in a given State should be eight per cent., and suppose the legislature should suddenly pass a law that no more than five per cent. should be charged, and fix a heavy penalty for disobeying the law. Two things will occur: first, money will seek other countries for an investment and the current rate will rise; second, the law will be evaded, if not violated, and those persons who borrow money will suffer. However, if in this given State people have been charging a large interest through long custom and lenders have a sort of monopoly on loan funds, laws may be passed asserting, for example, that six per cent. is the proper rate of interest; this measure will have a large influence in the reduction of interest, if there be a considerable amount of home capital. For the borrower will borrow less money, rather than to take it at a price which is declared exorbitant. And lenders, rather than have their money idle and rather than have it leave the State for a higher rate, will loan at a lower rate. Likewise, lenders will slowly adjust themselves to the new rate, simply because their attention has been called to the fact. In some Eastern States the rate has been fixed for years at six per cent. In these States, in country towns and country places at least, no one thinks of charging more. It is not the law so much as custom, education, and I may say religion, that keeps the rate below this maximum. On the other hand, without any collusion the banks of a small town may demand a certain rate because they

have always charged a certain rate, and thus refuse to take less. People who must have money will pay the charges rather than go without; but the same custom is observed to a large extent in merchandise in a small town, because it is slow to feel the rise and fall in the general market. Custom rules to a considerable extent, although these are really exceptions to the general law. Legislation for the reduction of the rate of interest has generally proved to be a dangerous thing for the borrower. A law fixing a maximum rate is very valuable in cases where no rate is mentioned in contracts, or where a judgment for interest is rendered. It also to a certain extent prevents extortion in certain cases. This is absolutely essential in all well-regulated countries.

Interest as an Economic Factor in Distribution.

While it has been stated that land and labor are the two essential factors in production, and precede capital in logical order, it is also known that when capital is once created it enters into production and claims its own reward in interest. Interest must always be satisfied wherever capital is used in production. The wages of labor and the rent on land are not more certain than the interest on capital. In the process of production many people go into business who are not capable of management, and interest finally absorbs their earnings and the result is they must quit business. But this does not militate against interest as a natural factor in distribution. Capital is a necessity in modern production, and its just reward is interest, which must be paid.

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CHAPTER V.

PROFITS.

Gross Profits.

Some classify all the returns of industry as profits, including rent for the use of land, interest on capital, and profits of management; but it is profits of management that concern us in the present analysis. Gross profits must be distinguished from the profits of the *entrepreneur* or manager, which are called pure profits. If we would consider any given business we should find that there must be a replacement of the amount of capital used out of the entire receipts of the year; that the interest on capital must be paid, and also a certain sum in the form of a payment for risk must be set aside to tide over bad years; and that the wages of superintendence must also be paid. If there is anything left out of the returns for a single year we call it pure profits, which goes to the manager of the business.

Pure Profits.

If we consider normal industry we shall see the division of the net product into the different shares accruing to landlord, capitalist, and laborer; we shall observe that industrial enterprises go on from year to year working on this basis. The managers of business may receive nothing more than the wages of superintendence. So long as they receive this, business will continue. If they fall short of this, business will cease. But there are certain concerns more favorably situated or better managed than others,

which yield a surplus of profits over and above the payment of the ordinary expenses of business. This surplus of pure profits accrues on account of excessive skill of management. It has sometimes been called the rent of superior characteristics. It more naturally falls into this category than any other. Yet according to most writers it is called profits, and we follow the rule to avoid confusion. Business ability or the quality of management makes the return of profits uncertain and indefinite. Nevertheless it is true that all businesses can be arranged in a group, passing all the way from no-profit industry to that of a large return.

Competition and Profits.

Competition also destroys pure profits, or tends to reduce them. The person who obtains some means of producing cheaply, or has obtained a desirable location, or by skill in advertising has succeeded in making a large profit, cannot continue long before others discover his secret and enter the same field. Hence in any given industry profits continue to decrease gradually; and the older the country the more rapidly they decrease. Hence there is a tendency to level down profits.

The Managing Class.

The power of the managing class in business is very great. An observation of the number of failures in business of any sort or description is evidence of the need of skill to conduct business properly and with profit. Thousands, presuming upon a skill they did not possess, have wrecked their business and dragged others down with them. In discussing the labor problem, or the problem of capital, not sufficient importance has been given to the managers

of business, who are the true employers of labor; nor sufficient credit for their part in productive enterprises. Without them the wheels of industry would stop; the modern process of production includes them as essential factors.

Profits and Rent.

As was stated above, the law of profits is to a certain extent governed by the same law as that of rent. The power to command profits must rest upon exceptional opportunities and exceptional abilities which combined make profits possible. There are a large number of people who are doing business for the sake of profits who obtain no return. All that their business pays is the wages of labor, interest on capital, and wages of superintendence, together with other expenses such as rent, taxes, insurance, etc. Pure profits do not emerge in the transaction. The result is that these businesses will continue to run until a fall in price or depression in trade causes them to close. Other businesses in the same line, on account of favorable location, the prestige of business through trade-marks, advertising, and other means, or through superior skill of management, yield a return in pure profits. It is easy to observe that the principle here is the same as that of rent. The chief difference is that profits arise from very uncertain conditions. There is less regularity in the appearance of profits than in the appearance of rent, nevertheless the principle involved is the same. While strictly speaking there might be no condition of business in which gross profits might not rise, there might be conditions of business in which pure profits might not be seen. But even this condition cannot long continue, for the *entrepreneur* who makes no return in a given year hopes to make the year

following. When he realizes that he does not receive profits, unless he be manager of his own business and receives wages of superintendence, he will cease to carry on business.

Pure Profits and Market Prices.

It is evident that pure profits do not enter into the price of commodities in a market, nor do they interfere with wages in any form. Profits themselves are obtained from wealth, which is created by extraordinary abilities or opportunities. The price of manufactured goods in a market is determined by the supply and demand, and the price has a tendency to fix profits rather than profits the price. The market price of goods is always indicated by the cost of production of that proportion of the supply which is produced under the most disadvantageous circumstances, just as the corn raised upon the poorest soil cultivated is an indication of the market price because the soil will be cultivated when it will barely pay the cost of production. Therefore the cost of production on poor land is evidence of the market price of the product. The same is true in regard to profits. The no-profits enterprise shows the cost of production, and as long as it pays the work will be carried on; that is, as long as the market price covers the cost the business will continue. Thus the no-profits business is an indicator of the market price, rather than a cause. Hence it will be seen that profits have nothing to do with the establishment of the market price.

As the payment of wages is a part of the cost of production, it is easy to see that pure profits are not increased by the reduction of wages. Considering the gross product, it is seen that wages are a variable proportion of it. It is

also seen that profits are a variable proportion of a variable product, and if in all the factors of distribution any one can be considered a residual claimant, it is profits. Therefore pure profits do not lower wages.

Monopoly Profits and Monopoly Prices.

Elsewhere we have referred to monopoly prices and monopoly profits. All profits are necessary, temporary, or monopoly profits. The necessary profits are that portion of the gross profits which keeps business running and without which business would cease. Temporary profits are those that are obtained from advantageous situation, opportunity, and skill of management, and are considered as pure profits. Monopoly profits arise when exclusive control of a given business is obtained, and are essentially more permanent than others. They arise from the universal control of a given business in which competition is shut out. The monopoly price is established on the basis of the largest possible return for a given business. It is only necessary to determine at what net price the business will yield the largest return of net income. For example, if we consider the possible prices of a given commodity to be six, eight and ten cents per pound or article, it is observed that if nine cents per pound there will be a given amount sold. If the price is raised to ten, the sales will be less and consequently expenses somewhat lessened in proportion to the sale. If the price is reduced to eight, the sales will be increased until the demand is satisfied. But with the increase of sales will be the increase of expenses. If the price is reduced to seven, the sales will be enlarged and the expenses increased. Now at what point will be the largest net return? This point

will be when the sales are relatively large and the expenses relatively small. Every monopoly working on a business basis will seek to find this monopoly price; though it has the power to charge a high price, it will not do so unless it can increase its income thereby. As a rule, permanent monopoly prices are steadier and lower than competition prices; and in most businesses it is true that the actual price is lower than the permanent monopoly price, for fear of competition which might set in where there are evidences of enormous profits. For nearly all monopolies are subject to changes, and may not be considered absolutely necessary, permanent affairs.

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CHAPTER VI.

COÖPERATION AND PROFIT-SHARING AS PROCESSES OF DISTRIBUTION.

Nature of Coöperation.

There is unconscious coöperation of all people engaged in production. There is also the conscious coöperation of people in the form of firms, trusts, corporations, and business houses. But coöperation in its purely economic sense means a union of laborers in a given enterprise, either of production or distribution. Where laborers band together, use their own capital, manage their own business, pay themselves wages, and thus have a right to the entire product of the industry, we call it coöperation. During the last half-century many attempts have been made to carry on this kind of coöperation, more or less of which have been successful. The real object is to get rid of the manager of business, who obtains the pure profits for himself, and make a division of these profits among the laborers. After wages, interest on capital, and the general expenses of management have been paid, the surplus earnings are divided among the members of the coöperative association.

Distributive Coöperation.

Coöperation is generally considered of two kinds: distributive and productive. Distributive coöperation is a trade operation for the distribution of goods, on a profit which is to accrue to all members of a given association.

If an association is formed for the purpose of conducting a store with special privileges to its members, an individual is employed to manage the store, clerks are hired, and wages paid. Money is borrowed, on which interest is paid, and all the ordinary expenses of the business are paid the same as in any other mercantile enterprise. Each member of the association puts in a certain amount of capital, which becomes the basis of the stock. Members then have special privileges of buying. They either buy their goods at a reduced rate, or, what is better, buy at an ordinary rate, receiving tickets stating the amount purchased. At the close of the quarter of the year, when all expenses have been paid and capital replaced, a division of profits occurs on the basis of amount of purchases of each individual. The Grange stores and the Farmers' Alliance stores of the United States have been the most prominent examples of this kind of coöperation in America. In England numerous societies have been formed in the past sixty years, and also in France and other countries. In England and France, especially the former country, distributive coöperation has been carried on with great success, although as a rule the experiment has failed in America.

Productive Coöperation.

This involves the creation of goods. For example, a number of laborers desiring to get rid of the managers, or "bosses" as they are termed, band themselves together, each one putting in a certain amount of capital to start the business. They either choose one of their members as an overseer, or hire some one for this purpose. Virtually they are laborers without masters, directing their own business and seeking to obtain the entire surplus of their

earnings. If business enlarges, they may take in more members or hire laborers to help. The goods manufactured are sold on the market in competition with goods of other firms. At the close of the business year, after they have allowed themselves wages, paid the interest on capital and the wages of management and all expenses of the business, they divide the profits or share the losses of the business. Wherever opportunities have been favorable for the development of coöperative business and from the first good management has been secured, productive coöperation has succeeded. But it is much more difficult than distributive coöperation, and therefore has not met with the same success.

Distributive Coöperation in England.

The most remarkable success of distributive coöperation has been in England. Robert Owens and others agitated the question of coöperation largely upon a communistic basis, and from 1820 to 1840 numerous experiments were tried in England, nearly all of which completely failed. In 1840 a group of weavers calling themselves the Rochdale Pioneers formed a coöperative association and opened a small store. It appears that at this time retail prices were very high, and that articles furnished laboring-men were of a very poor grade. The aim of this coöperation was to furnish good, substantial, unadulterated articles at a fair price to the members of the association. They began with a very small capital, each one furnishing a pound sterling, which was to be paid in installments. The establishment flourished and enlarged, becoming a successful business enterprise. Other societies were soon formed, until there are a large number in England carry-

ing on a successful business. After a large number of retail establishments had been formed, they began to organize wholesale establishments. So that England to-day has a system of distributive coöperation extending throughout the United Kingdom.

The Rochdale society grew from a small membership and an insignificant business with a small store, into three large coöperative branches, having in 1895 19,064 members; a share and loan capital of £476,222; an annual trade of £402,222, which yielded an annual profit of £57,776. More than this, the movement that started in Rochdale spread throughout the entire country, until in 1895 there were 1,486 distributive societies, having 1,314,093 members. The share, loan and reserve capital amounted to £16,494,630 and the annual trade to £34,224,815, which yielded a net profit of £4,892,712. The principles controlling distributive coöperation are so well learned in England that there are few failures now, compared with the number of successes.

In France distributive coöperation has not been carried on in such an extensive manner nor with such marked success, although the excellent work done there is remarkable. It is unfortunate that in the United States so many wrecked institutions have followed in the wake of the two great movements known as the Grange and Farmers' Alliance. The causes for these failures, however, are attributable to two distinct sources: first, that the principles governing distributive coöperation are not so well understood in America; and second, that politics in each case has steadily impaired the usefulness and

success of these two great institutions, primarily organized as non-partisan industrial enterprises.

Productive Coöperation in England.

The success of productive coöperation has been of more recent date in England. Indeed, it is much more difficult to manage than distributive coöperation, for it must depend upon the market of goods after they have been created. Numerous experiments have been tried in different countries with varying success, but it was not until 1870 that the movement received the impetus which brought it permanent success. Several productive societies were formed on a coöperative basis, in which the wage-earners became their own managers and secured to themselves all of the surplus profits. These efforts were greatly forwarded in 1884 by the establishment of "The Labor Association," which had for its special work the promotion of coöperation among the wage-earners. The importance of this association is sufficient reason for setting forth in detail its objects as given by Mr. E. V. Neale, its first president and founder:

"To form public opinion on the subject of associated labor by the following means, viz.:

- "1. The publication and supply of literature.
- "2. The delivery of lectures, addresses, etc.
- "3. The holding of conferences of all classes of persons interested in the elevation of the worker.
- "4. To assist workingmen to organize themselves for mutual employment.
- "5. To enlist the active members of the trade societies in the coöperative movement.
- "6. To secure a united action of trade-unionists and coöperators for mutual benefit and progress.

“7. To give information generally on the position of coöperative workshops and condition of workers.”

In order to carry out these principles and to obtain these objects, branches and lodges of the Association were formed, each governed by rules and regulations best suited to the ends sought. “It will be seen,” says Mr. Neale, “that the Labour Association is essentially a propagandist body, which seeks to form opinion, and thus to stimulate action, and, if it succeeds in calling forth productive societies, may serve as a valuable union among them; but does not itself propose to engage in any productive enterprise, and therefore will not in any way pledge the responsibility of any persons who may want to join it, by any sort of commercial undertaking.” By the means of this strong agency the cause of coöperation is kept before the people interested, and its gospel perpetually preached.

Among the societies that had exhibits at the Crystal Palace in 1896 the following industries were represented: Agricultural and Horticultural; Worsteds; Manufacture of Needles; Bookbinding; Boots and Shoes; Pianofortes; Nails; Pottery; Cotton Goods; Tannery; Watches; Buckets and Fenders; Quilts; Engineers’ Goods; Household Goods; Ironworks; Clothing; Hosiery; Printing; Cocoa; Leathergoods; Ship- and Boat-Building; Padlocks; Woolen and Cotton Goods; Sundries; Silks; and Woolens. Thus it is seen that the coöperative societies cover a wide range of industries and are capable of engaging in almost any enterprise. The progress of most of these associations is very slow, and yet the permanent and business characteristics are evident. Take as an example the Hebden Bridge Fustian Manufacturing Co-

operative Society, Limited, which was organized in 1870 for the purpose of manufacturing fustians, velveteens, cords and modes of all kinds. Hebden Bridge had long been the center for the manufacture of fustians. But the trade had for some time been disturbed and the relations between employers and employees had been strained. There was much suffering among the work-people. When one of their number, an old man, died on account of carrying too heavy a burden, it was necessary to raise funds by subscription to give him a decent burial. This was the occasion of forming a friendly society to provide for cases of this kind. They fixed the assessment at threepence per week, and agreed that the funds should be devoted to the establishment of a fustian cutting and dyeing establishment. About thirty, all poor men, formed the original company. Their subscriptions were at first very meager, but they continued to lay aside their earnings. When they accumulated £10, it was invested in a coöperative store in town. It was estimated that it would take £1,000 to purchase a dyeing establishment and rent a place to carry on the work. They rented a small room, and used their spare time to fit it up, and to put in a few fixtures. By vigorous work they found at the end of the first quarter they had a capital of £37 7s. and 11d., with which to begin work. The members did the work at the usual rate of payment, and this added to their share capital. The local stores became their customers and their market enlarged to adjoining towns. The society soon had sixty members, and they began to manufacture ready-made garments as well as cloth. In 1874 they extended their business and opened a dyeing shop, and in 1886

they enlarged their plant and began to weave their own fustians. The constant progress of the society is best illustrated by the following table:

CAPITAL.

<i>Year.</i>	<i>Members.</i>	<i>Shares.</i>	<i>Loan.</i>	<i>Reserve.</i>	<i>Sales.</i>	<i>Profits.</i>
1870.....	95	83	£3	—	£55	£3
1880.....	384	15,693	3,065	£556	18,625	1,774
1890.....	684	21,764	9,081	1,595	38,794	3,499
1891.....	732	22,399	3,979	1,427	40,178	3,723
1892.....	742	23,749	9,840	1,937	39,578	5,118
1893.....	746	24,497	8,652	2,610	39,991	4,427
1894.....	769	24,904	8,770	2,890	40,317	4,171
1895.....	797	25,845	6,771	3,859	43,569	5,185

At first, all profits accruing to workers are accredited to share account, until they have each £20 of stock in the association. In 1894 the results of business were as follows: The total amount paid to workers as wages was £12,851, and the amount of profit to workers was £642, computed on the basis of one shilling in the pound for wages paid. The average number of workers during the year was 294. Of the 797 members on the books at the close of 1895, 297 were workers, 300 were coöperative societies, and 200 were outside shareholders. The capital stock was held as follows: workers, £7,398; coöperative societies, £10,415; outside shareholders, £8,032.

Nearly all of the coöperative societies divide their profits among purchasers according to the amount of the purchase. A certain per cent. is given to capital, a certain wage and profits to labor, and a certain per cent. to customers. More than this, certain amounts are set aside for education, insurance, care of the sick, etc. Thus, in 1895 the society described above devoted £60 to education. It was one of the oldest societies formed. Among the

modern societies much more attention is paid to education and miscellaneous expenditures. Many of the manufacturing coöperative societies have stores of their own, or else make sales in connection with other coöperative stores. Thus, the Kettering Coöperating Boot and Shoe Manufacturing Society was established in Kettering, where there was a coöperative store of 3,070 members in 1894, having an annual trade of £57,613. The manufacturing society, after providing for interest on capital and depreciation, divided the gross profits as follows: 40 per cent. to workers, divided *pro rata* on wages paid; 40 per cent. to customers, divided *pro rata* on purchases; 5 per cent. to managing committee; 5 per cent. to provident fund; $2\frac{1}{2}$ per cent. to educational purposes; and $7\frac{1}{2}$ per cent. to capital reserve. The society is managed by a committee of twelve, chosen by the shareholders. Each member is required to hold five shares, and may not hold more than twenty-five. After reaching that amount, any further addition he makes to this investment is credited to loan account to the extent of £25, receiving five per cent. per annum and not sharing in the bonus on transferable shares. The business of this establishment has grown since 1889 from £3,588 to £26,255, in 1895.

The growth of the entire coöperative enterprise is best illustrated by the following table:

	1883.	1893.	1894.	1895. *
Number of societies ..	15	109	120	155
Sales for the year	£160,751	£1,292,550	£1,371,424	£1,859,876
Capital—share, loan, reserve	103,436	639,884	799,460	915,302
Profits	9,031	67,663	68,987	94,305
Losses	114	2,984	3,135	2,296
Net profit	8,917	64,679	65,852	92,109
Profit to labor	—	8,283	8,751	14,235

* Distributive and Productive Coöperation have continued to develop in England.

Coöperation in the United States.

The principle of coöperation in the United States has been used in very many different forms. Communistic societies have been established on a religious basis which have involved the principle of coöperation both productive and distributive. Very many other experiments have been tried for the purpose of building a complete social community like the Brook Farm experiment in New England and the Icarian community in Iowa, and in nearly every instance the philosophical or religious element entered in. More than this, the underlying principle was to control the entire life of the community,—religious, social, political, and economical.

The two great movements of distributive coöperation in the United States were those of the Grange and the Farmers' Alliance. The Grange, which was organized in 1866 and received its greatest impulse about ten years later, established distributive coöperative stores in nearly every State in the Union. These stores were to be owned and controlled by the farmers of their several communities, to order their goods directly from the manufacturer, and thus do away with the so-called middlemen and thus realize a margin of consumers' profits to the members of the association controlling the store. These stores met with varying success, a large number of them finally ending in total disaster. Only a few, which had a strong corporate existence and had entered somewhat into the nature of monopoly, were enabled to survive the stress of competition. There are many causes to which the failure of these coöperative institutions may be traced. Among the chief of these are found the failure of man-

agers to understand their business, the lack of union among the farmers in the association, the competition of more strongly organized firms with plenty of capital, and finally, the political trend of the association.

The Farmers' Alliance, which sprang up somewhat later, was but a revival of the old Grange movement; but the same principles were employed, which were to a great extent in accordance with the methods of the Rochdale Pioneers. Indeed, all distributive coöperation wherever successful has worked upon this plan. The causes of the failure of the Farmers' Alliance were in a measure the same as those of the failure of the old Grange stores, with the exception that politics had a wider influence in the latter than in the former, and, it may also be said, from the fact that there was less need of the Farmers' Alliance store than of the old Grange stores. For when the latter were started goods were sold excessively high in the West, and agents' profits were extortionate; in the former, owing to cheap transportation and excessive competition, prices of goods in the West were not too high. It must be conceded that among the beneficial influences of the old Grange store is that of the reduction of prices, and the more direct communication of retailers and consumers with the wholesalers and manufacturers. A great service was performed in this way, not to mention other services of increasing the intelligence and the political and social union of farmers.

Productive coöperation in the United States has many brilliant examples of success, and many more of wretched failure. Wherever there has been a fair market for goods and excellent management in business, these coöperative institutions have had a reasonable degree of success.

In the establishment of any manufacturing business the first thing to be considered is a profitable market. If a good market with reasonable profits is assured, there is an opportunity for the success of the association. But it is also necessary that the association be well organized, and that good managers be employed in carrying on the enterprise. More enterprises have failed for lack of business management than in any other way. While there is an opportunity to save time, material, tools, and to furnish an excellent quality of goods on account of the interest that laborers take in the industry, productive coöperative establishments have frequently furnished a cheap grade of goods, owing largely to a lack of intelligent management. Perhaps the most successful examples of productive coöperation were found in the coöperative coöpering establishments of Minneapolis, where there was a ready market for the finished product, and where an industry could be started with a small amount of capital. Other successful examples are scattered here and there in different industries throughout the United States.

Aim of Coöperation.

The object of the coöperative society is to interest the laborer directly in his work; to encourage him in the hope of reaping the share of the profits over and above the fixed charges; and to make him an independent business man who shall have a right to determine the direction of his own labor-power. As soon as his interest in the business is established he takes stock and becomes a shareholder, and thus receives the right to vote in the management of the affairs of the society. He now becomes careful of tools and material; is saving of time and prevents

waste; and he seeks to make a genuine, finished product. There is no need of strikes and lockouts; the war between capital and labor is over, because the capitalist and laborer are the same. Their common interests have been demonstrated.

Whenever productive coöperation can be successfully carried on, it has a good influence on society at large. Perhaps the labor problem can be solved in no other way except in giving the wage-earner a voice in shaping his own course, in managing his own business, in employing himself instead of being hired as a machine and thrust aside at the will of the employer. The idea of copartnership in business is elevating in its very thought. But if productive coöperation should succeed until a large number of workers should be employed in coöperative enterprises, these enterprises would begin to compete with each other, and there would be competition by groups instead of individuals. What then would happen to those who have not yet joined a coöperative association? They must of necessity suffer the results of grinding competition, which harms not their more fortunate coöperative brethren. But the time may come when these also will be forced to become coöperative. The great difficulty is that it takes a long time to make good coöperative workers. It is a process of education—a slow process. And one of the chief reasons of the failure of coöperation in so many instances is that those who enter it are not coöperative men by nature and by training. Its success has finally been demonstrated in England, and it helps toward the solution of the labor problem; but its judgment is not final or conclusive.

Profit-Sharing.

This method of associated work differs from both productive and distributive coöperation in the fact that the business management is still in the hands of the capitalist employer. The laborers share in the profits of the concern, but have nothing to say in the management of the business. However, in recent years the progress of all successful profit-sharing institutions is due to coöperation in which the laborers own shares of stock in the business and also have a voice in the management of the affairs.

The method by which profit-sharing is carried on is best illustrated by two well-known examples in America: the Proctor & Gamble Manufactory, located at Ivorydale, a small town in the suburbs of Cincinnati, and the N. O. Nelson Manufacturing Company, at Laclair, Illinois. The former employs about 500 laborers at the factory, besides another hundred in the Cincinnati office and on the road. The average wages of men is \$10 per week; of women, \$4.75; of boys, \$3.50 to \$7. The wages are considered only fair, yet the method the company has adopted of dealing with its employees has been such as to prevent any discontent, strike, or revolution. The firm was established in 1837, but the plan of profit-sharing was adopted in 1887. It provided for the distribution of the profits among the employees after allowing a reasonable salary of \$4,000 to each member of the firm who was actually engaged in conducting the business. The laborers were to receive the same proportion of the profits as the total wages bore to the total cost of manufacturing and marketing the product. For example, if the total amount of business done was \$100,000, the amount of wages paid \$20,000, the amount of profit made \$10,000, then the

total cost of making and marketing goods was \$100,000 less the profit of \$10,000, or \$90,000. The amount of wages paid was \$20,000. The amount of profits given to employees would then be in the ratio of 20,000 to 90,000, or two-ninths, and the proportion to the firm would be as 70,000 to 90,000, or seven-ninths of the profits. The laborers' proportion of the profits was distributed among them in accordance with the amount of wages earned by each. This plan was in force three years, during which the dividend or share of the profits averaged $12\frac{1}{3}$ per cent. of the wages.

In 1890 the firm of Proctor & Gamble was reorganized on the basis of the payment of 12 per cent. on the common stock, if this amount should be earned. This being practically the same rate earned by the employees under the old plan, it was an easy and advantageous arrangement to adopt a plan of paying employees as their share of profits the same rate of dividend upon their wages as was paid upon the common stock of the company. This method was adopted, and under it profit-sharing is now carried on. The dividends are paid semi-annually. To illustrate this: suppose a man earns \$500 a year in wages; he receives in addition a dividend of 12 per cent. on this amount, or \$60. The man that has \$500 worth of stock in the company also receives 12 per cent., or \$60. Thus the laborers and the stockholders are upon an equitable basis. All employees are entitled to begin to share in the dividends after being in the employ of the company for three months; but if one quits work or is discharged before three months' labor in the service of the company he receives no dividend. At first the laborers were divided

into full participants and half participants in profits. This was not found to be desirable, and all employees were placed on the same basis. Now, fully 98 per cent. of the laborers participate in the profits. The company reserves the right to deny the dividend to the employee for cause, but the amount of this unpaid dividend must be paid to other laborers, and does not go to the stockholders of the company.

The company not only allows sharing in the profits, but also encourages employees to acquire a part of the capital stock. Any employee may obtain a share of the common stock upon the following terms: \$10 at the time of application, the balance in installments of not less than \$5 each. Upon this balance he must pay interest at the rate of 4 per cent. per annum. In the meantime all dividends declared upon the stock accrue to the purchaser. But the certificate of stock is held by the secretary of the company as trustee for the subscriber until the final payment is made. There have been up to date about seventy or eighty shares taken by the employees, nearly all of which were purchased at prices varying from \$100 to \$128. The company has under consideration a plan to go one step farther, and guarantee the employees who hold stock against loss upon their investment. They find a good many difficulties in the way of the practical working of such a guaranty, but hope to make it a permanent part of their system.

Another important feature of the Ivorydale system is the pension fund, inaugurated for the benefit of the employees. This fund is created by setting aside the sum of \$500 semi-annually, half of which amount is taken from each profit-sharing dividend and one-half is paid by the

Proctor & Gamble Company. The management of the fund is in charge of a board of trustees composed of employees and members of the company. A pension is granted to any employee who has been in the continuous employment of the company for not less than seven years when partial or total disability to work has been caused by sickness, accident, or old age; and it is the company's intention so far as possible to provide those who are entitled to pensions with such work as they can readily perform, at such wages as the work is worth. The introduction of the pension fund is of recent date, but on January 1, 1895, there was \$2,000 in the fund, with one pensioner upon the rolls.

One other economic condition is found in the building and loan associations, which have enabled a few to build their own homes, and this is encouraged by the company.

The attempt to improve the social life of the employees has met with less success. Although library, reading-room and card-room have been provided free, they have not met with the success anticipated when inaugurated. This is doubtless owing to the many mutual-aid clubs, which furnish greater attractions than the reading-room and the library. In seeking enjoyment laborers have a tendency to scatter into other groups, rather than to associate among themselves in a single group; also, the widely separated position of the homes renders compact grouping almost impossible, as about one-half live near Ivorydale and the rest live in the city of Cincinnati.

When an employee is injured or sick, the physician employed by the company cares for him. The company also continues the wages of the injured employee through

the period of his disability, and seeks to emphasize the fact that employer and employee are associated for a common interest. Many methods are taken by the managers to show their interest in the employees. Thus, on Christmas day, 1893, three hundred turkeys were distributed among the heads of families. And after each semi-annual pay-day, in January and July, a day is set apart for a general celebration, in which employers and employees engage. The day is taken up with games, sports, and general jollification.

The entire profit-sharing enterprise is established on a business basis. Although altruistic motives may have been at the foundation of this scheme, it was originated for the improvement of the business with the belief that the benefit of the employee was in the end to be for the benefit of the employers. Most of the laborers being unskilled at this time and below the average intelligence of skilled workmen, it was difficult to persuade them it was not a scheme to get more work out of them for a corresponding equivalent. Also, they were disposed to take the dividend as a matter of course and spend it freely and sometimes foolishly. But time and experience have dispelled this idea. The success of profit-sharing there, as elsewhere, is a matter of education, and many efforts of profit-sharing have failed elsewhere simply because the employers failed to remember that the employees must be educated up to it. Patience as well as justice is required for success. During the first two years the profit-sharing was not a success as a money-making investment, but as the men became more and more convinced that they were treated with justice they became more and more careful and more intelligent in the work,

until it is plainly demonstrated and freely admitted that the saving is much in excess of the sums paid to wage-earners as profits.

The success of the plan has exceeded the expectations of the company. The gain is in the saving of time, in the diminishing of material, in making a better quality of wares, in keeping men of experience, and finally, a saving of oversight. These are the principles which have been maintained by the advocates of profit-sharing, and it is gratifying to find that they agree with the experience of those who have carried it out. There have been no strikes or labor troubles of any kind at these works since this plan has been in force. Employees remain longer in the service of the company, and it is very seldom that a man is discharged on account of lack of work. It demonstrates that the interests of the employer and employee are the same, and any warfare between the two classes is an unnatural warfare and works against the interests of both parties engaged in it.

Another very important example of profit-sharing is furnished by the N. O. Nelson Manufacturing Company, a corporation for the manufacture and sale of plumbing goods, steam goods, and machinery. The firm was first established in 1877, incorporated in 1883, and began profit-sharing in 1886. Its factories are in St. Louis, Missouri, Mound City, Illinois, and Laclair, Illinois. The number of employees varies from 400 to 500, and the wages range from \$1.25 to \$1.50 per day for common labor, and from \$2 to \$2.50 per day for skilled mechanics. The company runs full time, with the possible reduction to three-fourths time for perhaps a month in midwinter.

About one-half of the company's works are located at Laclair. Here the factories are well built, heated with steam and lighted with electricity. The company owns 125 acres of land, 15 of which are reserved for factory uses and 110 for residence purposes. There is no attempt to build a model town, as there are no models for houses or modes of action for people. It was held that in every respect life should be as free from restraint as on a farm. But the streets are well laid out. They are paved with cinders and sprinkled in dry weather. Plank sidewalks prevail where needed, and shade trees have been planted on all the streets. Water and street lights extend wherever there are dwellings.

The company has made it possible for employees to purchase land at a very low rate and build their own homes, paying for them in monthly payments. Should a person desire to move from the town, the company takes the property from him without his loss.

The plan of profit-sharing adopted varies somewhat from that of the example just given. It sets aside one-tenth of the profits for a reserve fund, one-tenth for a provident fund, and one-twentieth for an educational fund; the remainder is divided equally between employers and employees. The reserve fund was set apart to meet the loss of a bad year, and to equalize dividends when profits were small. The provident fund was created to take care of the sick and disabled and the families of deceased laborers. This latter fund is in the hands of a committee of five of the employees, elected by the employees themselves. Special rules are made for the control of the expenditure of this fund, so as to meet all

the requirements of the capitalist. There are no conditions attached to employment and profit-sharing except a man's capacity for work. There are no agreements respecting unions, time of service, nor the manner of quitting. Finally, the manner of division was modified so as to yield 2 per cent. on wages to every one per cent. on capital, and the earlier practice of setting aside 10 per cent. for provident fund and 5 per cent. for educational fund was displaced by paying out whatever was necessary for these funds and charging the same to gross profits.

The results of the first year's business after profit-sharing was adopted gave a dividend of 5 per cent. on wages; second year, 10 per cent.; third year, 10 per cent.; fourth year, 8 per cent.; fifth year, 10 per cent.; sixth year, 8 per cent.; seventh year, 4 per cent.; and in the eighth year, which was 1893, no dividend was declared. The total dividends paid to wage-earners as their share of divided profits has been \$65,000, or an average of 9 per cent. on wages paid. In the beginning, dividends were payable in cash or the stock of the company; but in recent years, in order to make a solidarity between capital and labor, the company insists that all dividends shall be paid in the stock of the company. Perhaps there is no other feature that binds the employees and employers so closely together as a participation in dividends and sharing in the profits of the concern.

One other economic condition here is worthy of especial attention: this is the coöperative store, which was opened in May, 1892, and incorporated under the laws of Illinois for the purpose of furnishing consumers with goods at moderate rates. The laws under which it is incorporated

provide, among other things, that no one shall hold more than one share or cast more than one vote, and that all profits above interest shall be divided among members. The capital stock is two thousand shares of \$50 each. The business consists in buying and selling any class of goods required by members, and manufacturing. It is under the control of a board of directors, elected annually by the members. All business is conducted on a cash basis. All goods are retailed to members or non-members at the ruling prices as indicated by the actual prices prevailing in stores in the vicinity. At the end of each quarter the books are balanced and dividends declared according to the recommendation of the directors and the approval of the stockholders, in proportion to the amount of the purchases of each individual during the quarter. Only half-rate dividends are given to non-members. The dividends have varied from 10 per cent. to 20 per cent., except in one quarter when there was no profit at all. The business is carried on entirely upon an economic basis.

Some attempts have been made to improve the social condition of the laborers. There are free billiard-rooms and bowling-alleys, a small grove where swings and benches are provided, and a baseball ground. The company maintains a landscape gardener, and keeps a greenhouse from which residents are supplied free of charge with as many flowers as they wish to set out and care for. A well-organized literary society is in existence, where occasional lectures by distinguished men are given. There is a well-trained band which gives open-air concerts during the week on the grounds adjoining the club-house. A library containing about 600 carefully selected books is

free to all. A large number of the readers reside outside of Laclair. There are provided also a kindergarten and public schools. In the school, students are admitted on part time and allowed to work in the shops or on the farm during a portion of the day, for which they receive compensation.

As to the results of the entire system as practiced by the N. O. Nelson Company, it is the opinion of the managers that the waste of time and material has been greatly reduced; that there has been a better attention to business; and that there has been established a solidarity of employer and employee in a common business in which they are mutually interested, from which they draw mutual profits.

The brief statistical presentation of these examples of attempts to solve the labor problem reveals to us the fundamental proposition in the process of its solution, namely, that as interests of capital and labor, of employer and employee, are common and all warfare between them is unnatural, any system which will tend to establish this fact will have within itself the basis of success, and any system which fails to establish this certainly will not succeed. There must be established a solidarity of interests of employer and employee upon an economic basis. There must be established a feeling that their interests are common. Having established this, and acting upon it on the basis of absolute justice, any rational plan has the probability of success. If this be continued further in the social life, so that the employer and employees mingle together on a common basis, the barriers now existing between the classes will be broken down and there

will be a common sympathy and trust between them. From the foregoing examples we may infer that a successful solution of the problem rests upon the observance of the following principles:

1. The laborer must have an economic interest in the product of his own industry to insure care of tools, saving of time, saving of material, and the creation of a better quality of goods.

2. He should be received into total or partial partnership in the management of the business through stock ownership or some similar means.

3. Both employees and employers should coöperate in furnishing means of social improvement.

4. While working together the utmost sympathy should prevail between the employer and the employee, and at the same time due respect should be given to the respective position and rights of each class.

5. In order to bring about the above conditions the employers must cease to combine against the interests of laborers and the latter must cease to combine against the former.

6. To gain the confidence of the public in all efforts to their own improvement, laborers must cease to militate against members of their own class, and recognize the rights of all men to work for wages according to their own choice.

7. And finally, it may be said, to accomplish the above there must be a constant education of both employers and employees concerning the rights, duties and limitations of each class and the mutual interests of each class as if no class distinction existed either on an economic or social

basis. And this leads to consideration of individual character as causation in social improvement.

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CHAPTER VII.

LABOR ORGANIZATIONS.

Origin of Labor Organizations.

A reference to the origin and history of labor organizations will show that they have had a natural and essential development. Just as we have the development of government itself or the natural process of the evolution of corporations or of other social or economic organizations, so we find in the present existence of labor organizations the natural outcome of the economic conditions of the world during the past two centuries.

The American Trade Union has a representative, in idea at least, in the ancient guild. The citizens of the towns in the Middle Ages formed themselves into guilds in order to defend themselves against the attacks of lawless barons of the country. The whole body of citizens were united against the robber outlaws who sought to exact from them all the taxes and fines which they could take by means of persuasion or coercion. But as soon as the town guild had obtained its independence, it was ruled by a body of noblemen, who in turn concluded that they were the town, and opposed all of the common tradesmen and craftsmen by their arbitrary and high-handed procedure. Then history repeated itself in the picture of the man who struggled to free himself from his oppressors, as these oppressed craftsmen now formed themselves

into guilds and governed the towns themselves for many generations.

These craft guilds represented the union of all tradesmen of a single craft in one organization. Each guild included masters, apprentices, and laborers. There was no division here between masters and workmen; they were all of one body and their interests were common. In this early time, very little capital was necessary for production, and the distinction between the capitalistic employer and hired labor scarcely existed. Each craftsman, with what little capital he commanded, worked with his own hands alongside of his apprentices and laborers. The servants were generally hired by the year, and the apprentices were bound by the year; so it was to the master's interest to keep everybody at work whether there was a demand for goods or not. So he did not wait for orders to come in, but kept manufacturing and placing the goods upon shelves as a stock in trade. The apprentices, after having learned the trade, frequently left their master and started up a new manufactory for themselves. Living this quiet, unassuming, peaceful life, the craft guilds were united in an association which tended to establish honesty of work and brotherly kindness; to defend the oppressed and to relieve the distress of the less fortunate.

As time went on, complexity of trade increased, more capital was required in production, and the craftsman now became the capitalistic master; for besides his servants and apprentices and members of his own family, he hired laborers or journeymen who worked for wages. In this situation, it became a question to be settled partly by the state and partly by the craft guild as to how many ap-

prentices a master might have, and also how many hired laborers he should have, what rate of wages he should pay them, and how many hours they should work. As wealth increased the masters ceased to work with their own hands, and their laborers became a distinct class by themselves. This change was brought about slowly, but surely, which separated the employer from the employee. This social separation of the employer and the employee was greatly facilitated by the discoveries and inventions occurring in the later half of the eighteenth century. These are epitomized as follows by Professor Marshall:

“Between the years 1760 and 1770 Roebuck began to smelt iron by coal; Brindley connected the rising cities of manufactures with the sea by canal; Wedgwood discovered the way of making earthenware cheaply; and while Hargreaves invented the spinning-jenny, Arkwright utilized Wyatt’s and High’s inventions for spinning by rollers, and Watt invented the condensing steam engine. Crompton’s mule and Cartwright’s power loom came shortly after. These inventions took manufacture away from houses and cottages and gave it to factories and large workshops. Armies of men came together under the management of capitalist employers, and the modern wage question made its first appearance.”

It seems that many of these employers were harsh, overbearing, cruel men, and under the new conditions they cared little or nothing for the condition of the laborers under them. It was not long before great factories requiring much capital were built, and there were congregated in them large bodies of workmen under a common overseer. The work of separating the capitalist from the laboring class was completed; the struggles of the labor-

ers against the employers had now begun. And whatever sympathy we may have for the modern laborer in his attempts to secure kind treatment and justice, whatever pity we may have for his ignorance or misguided ambition, no one can read the history of the struggles of the laboring classes of this period without deploring the misery of their situation. The laborers were thrown into evil conditions for which they were not responsible; with fourteen hours of labor in great factories with impure air and insufficient light, with poor wages and harsh treatment, they began to look around for some way of redress. And the first means which they took was the attempt to revive some old legislation respecting labor, and they urged the enforcement of two old laws passed two centuries before, which limited the number of hours of labor, the number of employees each master weaver might have, and held that the number of apprentices in a shop should not exceed by more than three the number of journeymen, and which reiterated the law that wages should be periodically fixed by the justice of the peace.

Now the first united efforts were for the purpose of petitioning Parliament to enforce these old laws. In this the laborers failed, and were convinced finally that they would look in vain to Parliament for redress of grievances. Then they began to form unions of their own, uniting in sympathy, mutual aid, and common defense against their employers. At first there were many laws passed against their assemblage for the purpose of labor agitation; laws making it a misdemeanor for a person to refuse to work when wages were offered him, thus precluding the right to strike. Is it any wonder that, born in those

troublesome times, the unions became harsh and bigoted and narrow-minded in their conception of their own interests? The laws, indeed, "had made a crime of what was no crime"—the crime to refuse to work in order to obtain higher wages. They knew that this law, and all laws respecting labor, were full of class injustice, and many of them being rude, ignorant men, they were in turn unjust, and as fast as power came to them were ready to be unfair. If we glance at the unions of to-day we find a great contrast between the leaders of these old unions in their bigoted, narrow, and cruel lives, and leaders of the modern union; and the rank and file of to-day is far in advance of the rank and file of the ancient union. Nevertheless, to-day we find at times a spirit of the same harsh, narrow, bigoted, and short-sighted life,—the folly, ignorance, and selfishness cropping out in the modern union. But this is usually in the smaller unions, belonging to the weaker part of the organization, and are conditions which are greatly deplored by the intelligent laborers and liberal leaders, conditions which are rapidly changing as intelligence increases among laborers.

Development of Trade Unions.

From this time on, trade-unionism developed steadily in England, but not rapidly, until the year 1830, when, all restrictions being removed, unions sprang into being at once and as necessary organizations. It appears from this view of the early origin of trade-unionism, that it was a natural development, and that the capitalistic class on one hand is as responsible for its existence as the laborers on the other. It is an expression of the natural

right that must hold everywhere, to organize for the sake of self-protection; just as the organization of capital in production was a normal process of economic evolution, so was that of the organization of labor. In reality, the employers of labor are not more responsible for the condition of labor than are laborers for the condition of employers, except that capital took the initiative in organization.

After trade unions had been established, the next step in their development was the formation of amalgamated associations. There sprang up in England and America a tendency to unite, in federal assembly, all the principal unions for a common cause. This has been going on rapidly, and there has been in the past thirty years a strong movement to make one solid organization throughout Europe and America. On the one hand, the Knights of Labor have stood for this organization on the basis of uniting all unions and assemblies in one great body, upon a political basis for power, not only at the polls, but elsewhere, that they might force all opposition to yield to the demands of labor. On the other hand, there is a great American Federation of Labor, which desires to federate trade unions and to leave each one in possession of its own local affairs, yielding to local government. There has been a little friction in the past between these two great organizations, the former standing for imperialism, the schedule of government absolute in nature, and the other standing for local self-government of each trade assembly. There has also been an amalgamation of all unions in the same branch of industry throughout the

United States, such as the International Typographical Union, which was instituted in 1850.

In the United States the first trade union was formed by the tailors in New York, in 1806. But labor agitations continued in New York at intervals, only a few unions being formed down to the year 1830. From that time on until 1851, we find a great labor movement and the constant development of unions of different kinds. This received a strong impulse by a meeting of farmers and mechanics and other workmen in Boston in 1831. During this period mentioned there were numerous strikes by the various unions, and strenuous efforts were made to reduce the hours of labor. In July, 1833, the workmen of the Thompsonville carpet factory struck for an advance in wages, and the carpet company sued some of the strikers for conspiracy. In the trial by jury which followed, a verdict was given for the laborers. This had a tendency to encourage strikes. Then followed a long struggle by the trade unions for the right to exist. The matter was finally decided in their favor, and victory was achieved. A second industrial congress convened in New York on June 10, 1847, received a wide representation, and organized labor was recognized as an institution of great power and entitled to a position in the industrial world.

But while this period of which I am speaking was the time in which organizations were struggling for rights, the great time for organization and progress in America began in 1861, and has continued without cessation to the present time. Now, nearly every trade in America is organized, and there are large numbers of amalgamated

associations besides the American Federation and the Knights of Labor.

During the summer of 1894, the American Railway Union, under the leadership of Eugene V. Debs, came into prominence. Its purpose was to organize all railway employees into one body and to precipitate a general strike, thus blocking the wheels of industry from the Atlantic to the Pacific. How nearly the plan succeeded we are all aware. The failure of this for a time gave less hope to labor leaders in the efficacy of the strike as a means of improving the condition of labor.

Knights of Labor.

In addition to what has already been stated, the Knights of Labor are an organization of employees both skilled and unskilled, and regardless of any trade or occupation. The aim is to break down the barrier between the different occupations and local unions. They have taken a broader view of the social organization of labor, and thus have included not only all classes of laborers in their membership, but also employers and professional men. Their prime object is not that of warfare alone, but a complete organization of all the productive forces of industry. They hope, by showing the relations of labor and capital and their mutual benefits, to demonstrate that there is a necessary union of the two in practical work; but they also claim in this union the rights and privileges of the laboring class. They have, besides a general national organization, a series of district assemblies, in which a considerable number of trades have been united in a common federative group. The Knights of Labor

at times show great strength, and again are weakened by strife and contention. In fact, all labor organizations advance and recede in their movements with the condition of the times, certain conditions being more favorable to their development than others.

The federation of the trade unions, on the other hand, has been at enmity with the Knights of Labor for several years, the trade unions representing the local fighting units of organized labor and always contending for their individual rights. Consequently, the Knights of Labor in their attempts to break down all class distinction find themselves in direct opposition to the practices of local assemblies.

There has been an attempt to organize all laborers into one great mass, not only as a national organization but also as international, so that when a strike is declared it shall be for the whole world, and industry will be stopped until terms are made with organized labor. Up to the present this seems to be an impossibility, yet we do see a growing tendency that way; but that growing tendency is also tempered with a conservatism, on the other hand, which would prevent any such radical movement. Should it ever come to a test of this kind, the so-called employer, or capitalistic class, could endure a strike longer than the employees themselves. For indeed at present, when one branch of labor is striking, it can be supported by another that is earning wages. In Australia at one time nearly all laborers were organized, so that industry was practically stopped. Yet the laborers were finally obliged to yield, although with certain gains.

Objects of Trade Unions.

The first and fundamental principle of trade unions is to insure a just recompense to labor in the form of higher wages or shorter hours. The larger proportion of strikes that have taken place have been for either higher wages or shorter hours. The unions also have a large work to do in protection and assistance of needy fellow-laborers. This has become one of their fundamental laws. The third object is the improvement of the social conditions of the wage-earner by education and other means. In the modern trade union or general labor organization these are the fundamental points to be gained.

But it must be admitted that in many of their attempts the unions have failed, as do all organizations. Indeed, the state in which we live is sometimes imperfect and has some faults, and the church in which we believe has still its defects; and so, when people censure labor organizations, they forget that these new organizations, which have sprung up according to natural economic laws, are also dependent upon the same vagaries of human nature and imperfections of human government as are other organizations, and, indeed, that ignorance, selfishness, and obtuseness have a tendency to make all organizations imperfect, and frequently unjust. Nevertheless, a large number of those who have opposed labor organizations have failed to consider their natural reason to be, and their real beneficial effects. It is true, there were many reasons for attacking the unions in their early days, but the sensible way is to recognize their helpful principles and to combat their abuses as we do those of the church, the state, and the political party.

Thorold Rodgers, in his work on wages, in speaking of labor organizations, says: "A long study of the history of labor has convinced me that they are not only the best friends of workmen, but the best assistance for employer and the public, and to the institution of these associations political economists and statesmen must look for the solution of many of the most pressing and difficult problems of our times." This is rather a hopeful view of the question. Nevertheless, it is being verified to a certain extent in the fact that employers at large are recognizing union men, and as a rule prefer union men to non-union.

But first, and above all, the trade unions have increased the intelligence of the laborers. The bare fact of their meeting together and discussing the questions of the day, the building of libraries, the listening to speeches, and the publication of newspapers devoted to laboring interests,—all of these things have a tendency to give increased intelligence to the laborer. But it may be added that where this increased intelligence comes there is an elevated standard of life which commands an increase of wages. Of course this education and the elevation of the standard of life is also influenced by a limitation of numbers in a single trade, and were it not for other things this limitation in one trade would simply overcrowd other trades. But this increased intelligence leads to the prudential virtues, and a tendency to limit population and to maintain a just balance between the laborers themselves and the means of development.

Yet another field in which labor organizations have done a great work is that of temperance, for nearly all labor organizations are in themselves temperance societies, and,

indeed, many of their officers are total abstainers. Anyone acquainted with labor unions can see what a vast advantage has been gained in this respect. They have improved the quality of labor by means of temperance, and intelligence and skill have more rapidly developed.

The unions have also greatly improved the social condition of laborers. Anyone can go into a laborer's home to-day and see there the many comforts of life. There are family associations of an elevated nature and of a pure and genuine character. One will be forced to admit that there has been a wonderful improvement in the common laborer since the labor organizations sprang up. While not all of his progress is due to organization, much of it would have been lost had he stood alone against the momentum of capital.

Besides the foregoing, the labor organizations have been compelled to cope with the arbitrary usage of the employer, or capitalistic class, and have done something to gain those rights which belong to them. They have maintained wages by the force of strikes, if not always in a direct at least in an indirect way.

Mistakes of Unionism.

Yet in spite of these many good qualities, the labor organizations all represent many weaknesses. Their aim may be industrial peace, but they are all prepared for war. The strike is their means of warfare; and it is greatly to be deplored that it sometimes seems necessary, just as all war is to be deplored, though sometimes necessary. Strikes as a rule are unfortunate affairs, and in nearly every case, unjust affairs, on account of either one party or the other. Yet it is true that they have revealed some-

what the condition of labor to the people at large, and have a vast educative influence on the employer, the employee, and the lookers-on. It is to be deplored that the real ultimate power of the labor organization rests upon the strike; and yet in this case we must not be harsh with them, for, indeed, it not infrequently happens that though they appear as the aggressors in certain labor movements, the employers themselves have been the real cause of bringing them on.

It must also be said against them, too, that they have been partial monopolies, with the intention of being complete monopolies as soon as possible. We deplore the injustice and abuse of combined capital, especially in the form of trusts, which tend to limit the food-supply of people and thus to cause hunger and want and distress; or the combination of coal companies in the time of winter, which causes poor people to suffer from cold in their rude apartments and leads to disease, pauperism, and crime. At the same time we must consider the same principle on the part of the laborers who organize strikes unjustly for the purpose of making a shortage in labor, and thus to depress and destroy industries. It is the abuse of monopoly of labor as the abuse of monopoly of capital that is the evil. In themselves they may both be turned to good. Each is to be put in the same category of good or evil, of justice or injustice. And right here it may be stated, that, failing to organize all laborers into a class, they turn as enemies against the non-union men, or "scabs," as they are called, denying them the privilege to earn bread to keep their families from starving, and thus show an injustice and short-sightedness that is un-American and belongs to

the times of medieval barbarism. In this way they hope to monopolize labor by controlling all labor within a given field of operation. Their object is not an increased production, but a question of distribution, or of directing a larger supply of distributed goods to their own class.

More than this, in seeking the exclusive interest of class they are in danger of losing interest in the reforms which tend to benefit common humanity, and in this they are short-sighted and conservative, clinging to old ideas instead of accepting new ones. They fight the introduction of new methods that tend to facilitate the production of economic goods and to benefit general humanity. In other words, in attempting to gain an immediate benefit, they bring about an ultimate evil to society.

There are minor evils of trade unions, such as an interference with the apprentice system. They have discouraged apprentices to a large extent, and limited the number that may be taken by an employer. In this the trade unions have, in a measure, helped to break down the old apprentice system. It is difficult for a man who desires to learn a trade to have any opportunity, unless he joins a union and learns under its direction. To a large extent this is to be deplored.

There are minimum rates of wages, and all laborers must come within the boundaries of these fixed rates as agreed upon by union men. There is a tendency to level down, to suppress that individual effort which permits a man to rise above his fellows. Without intending it so, this leveling down is to the detriment of that which has been a means of the elevation of the English race, namely, individual responsibility. If a member of a union at any

time does a little too much work, or is zealous to please his employer, they call him a bad name and say "he wants to rise above us," and then they turn his action into ridicule. This has a tendency to suppress honest, individual effort to rise above all surroundings, and without so desiring it the union has a tendency to produce a dead level in society, discouraging progress. While the general result is that of advancement in the trade unions, in this respect it is non-progressive.

The right to strike cannot be denied labor organizations, any more than the right to organize, except it be the cause of a great injustice to a large number of individuals of a community. But the trade unions have greatly abused this power to strike; they have been injudicious, sometimes urged on by scheming leaders who have sought for prominence in the union, but more frequently urged on by the opinions of ignorant, stupid men, who have talked over their grievances until they have made mountains out of mole-hills. I may say in this respect about injudicious leaders, that there is as much demagoguery and ambition for power within labor organizations, in proportion to the numbers, as in any political party in the United States. Human nature is the same here as elsewhere. Whereas the right to organize may be claimed by any body of people in our free country, and the right to strike for higher wages may also be accorded in a general way, nevertheless, it is true that this same position may be taken and held unjustly. Though the law may or may not decide in this way, it is the common opinion that no small body of men has a right under any circumstances to discommode the whole

economic world from the Atlantic to the Pacific without being arraigned for injustice, by the common opinion of right-thinking people.

Result of Strikes.

We come to that important question, the results of strikes. Are strikes beneficial or detrimental to the interests of laborers? If we sum up the immediate gains in most strikes, by the increase in wages, and on the other hand take the losses incurred on account of time and expense to the laborers, it can be claimed that the larger majority of strikes are failures. And if we add to this the inconvenience caused to the community, the disorganization of trade, the loss to capital, it may be said directly that strikes fail. But if we consider the indirect influences, keeping up a common sentiment of higher wages, why, then possibly the victory has been with the labor movement; for in no other way can we account for the great general improvement in the labor community and the increase of wages.

It will be seen by looking over a list of the strikes that occurred during a period from January 1, 1881, to June 30th, 1894, that where strikes were just and laborers responsible for their demands, they usually succeeded. But where they were unjust and unreasonable, and where, despite all that which legitimately fell to them, they tried to manage the employer's business, we may say they failed. During this period the total number of establishments striking were 69,162. Of these, 21,580 were for the increase of wages; 10,543 for reduction of hours; and 5,564 against reduction of wages; and for both in-

crease of wages and reduction of hours, 4,787. These are the four chief causes of strikes, although strikes for sympathy and for recognition of the unions are increasing. Of the total number of strikes, 44.49 per cent. are reported as successful; 11.25 per cent. as partially successful; and 44.23 per cent. as failures. During this period 3,712,561 men were thrown out of employment on account of strikes; of these, 2,061,259 were on account of unsuccessful strikes. The loss in wages to employees was \$163,807,657, and on account of lockouts for the same period, \$26,685,516, or a total loss to employees of the enormous sum of \$140,493,173. The loss to employers for the same period on account of strikes and lockouts was \$44,825,237. A large proportion of failures have been on account of the demands for change of time for beginning work, discharge of employees and foremen, discharge of non-union men, against the employment of non-union men, and for the reduction of the hours of labor, and so on; while the large proportion of successes have been for an increase of wages and a reduction of hours.

There seems to be a tendency for labor unions to be more and more conservative in respect to striking. They are learning by degrees what they may accomplish and what they may not, and while occasionally we see a disorderly strike in which there is no real cause or occasion, we more frequently see one that is advocated on account of some special grievance. A large proportion of the officers and leaders continually counseling infrequency of strikes, shows that there is a tendency, as intelligence increases, for people to be conservative. They recognize that there are limits to what they may do.

Influence of Trade Unions on Wages.

In discussing the laws of wages there are fixed what are called a superior and an inferior limit. The inferior limit represents the lowest grade of wages, below which labor cannot perform the services demanded; the superior limit represents a point above which, if wages rise, there will be no employment, and a large number of laborers thrown upon the market will tend to decrease wages. Of course it is well known that the rate of wages depends largely upon the law of supply and demand, but trade unions attempt to diminish the supply of regular laborers. This is one of the main points of the strike, viz.: to walk out and leave the employer without help. They attempt to fight one monopoly by creating another. Labor is not perfectly mobile; it combines in groups, one group with another group, and cannot be sufficiently detached for general competition. The result is that the unions can make a shortage in any given industry, and thus raise wages by destroying the equilibrium of supply and demand in any given occupation. But the plentifulness of labor in all occupations has been detrimental to their highest success in this respect. They also fail in another way. If the coal miners strike for higher wages and thus enhance the price of coal, members of other unions must pay a higher price for coal, greatly to their detriment. Again, if railroad men strike, and thus hinder the delivery of raw materials or machinery that would employ another class, they too are thrown out of employment, and the result is that one part of the laboring community works against the interests of the other part. Upon this principle there is a general desire to make all labor one solid organiza-

tion. But, owing to diversity of interests, which must first be overcome, this is a difficult matter. However, wages may be increased by the general operations of labor organizations.

What do the laborers demand? They say, "We must have a larger share of the product of industry;" that, "As much can be produced in one hour now as in a day formerly, but wages are not increased. We get little benefit of the increased facility of production." This is only a partial truth. The rate of wages is increasing, but not in proportion to the increased rapidity of production. Yet there is a limit to what a laborer may get. And the operations of trade unions cannot force wages above a certain limit determined by the conditions of industry and labor. The laws of wages forbid this.

Effectiveness of Labor Organization.

Perhaps the economic services of labor organizations are best seen in the attempt to raise the standard of life and to create a temporary monopoly, at least, for the supply of labor. In modern times they have sought to induce people to use only things with union labels upon them, which are supposed to guarantee that they are made under the conditions of a high standard of life and well-paid labor. This has had a certain influence in producing a certain grade of goods and in preventing the use of sweat-made garments. In this respect they have had a stronger influence than the consumers' league or any other agency for the purpose of encouraging well-paid labor.

It is quite interesting to notice the growing power and influence of labor organizations. In England they are working on the basis of productive and distributive co-

operation and the proper protection of laborers. The strike as a means of warfare is gradually dying out in England, although occasionally it breaks out with unprecedented fury, largely with the class of laborers who are less skilled and have not yet obtained their independence by right living. In America the strike has not yet been abandoned, but in most instances it occurs among the more ignorant laborers. It is still, however, a powerful weapon in the settlement of the grievances of laboring people. Wherever the demands of laborers have been rational they have in most instances succeeded, because they have had the support of the press and to a large extent that of the people. For every one who is interested in the welfare of the republic wishes to see a well-paid, industrious, intelligent, prosperous and happy body of laborers.

Arbitration and Conciliation.

There is more and more a tendency to settle all labor difficulties by arbitration and conciliation. In the first place, they attempt to bring employer and employee together on the basis of agreement. It would be good economics as well as good politics if there were a Board of Arbitration in every State of the Union, which would sit first as a Board of Conciliation, trying to bring employer and employee together upon the basis of agreement; and second, if failing in this, to sit as a Board of Arbitration, with power to decide that if laborers do continue to work it will be at a given wage within a limited time, and if employers go on with their business, they shall do so under the terms dictated. This is good politics, because two groups of people in a free country have no

right to enter a quarrel which disturbs the peace and destroys the effect of the other men's toil, wasting their wealth and destroying business. It is good economics, because every strike entails great losses both to employers and laborers. The employer's loss would be the margin on goods, the laborer's in the form of wages. Under these circumstances a Board of Arbitration would so influence both parties that they would adjust themselves to the conditions. Long-time agreements would be made, and rather than pass to the State Board of Arbitration they would agree to settle all difficulties by a private Board of Arbitration made up of laborers and employers.

There is at present a considerable discussion as to the relative desirability of compulsory and voluntary arbitration. The former has been successfully tried in New Zealand and the latter in England. Should voluntary arbitration become sufficiently universal, it is better than compulsory. Yet the latter should be insisted upon whenever the former fails to do its proper work; and as stated, even in compulsory arbitration, voluntary agreements should be encouraged and compulsion used as a last resort. Nevertheless, arbitration of some sort, protecting the rights of both parties in the strife, is the most desirable and effective solution of the difficulty, because it is the normal process in the evolution of law and social order.

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CHAPTER VIII.

THE DOCTRINE OF SOCIALISM AND THE PRESENT ECONOMIC SYSTEM.

The Claims of Socialism.

The socialists find fault with the present economic system on account of the waste of competition in production and the injustice of distribution. Recognizing, as every one does, the imperfections of the modern system of economics, they set forth in contrast an ideal system in which competition is destroyed and all economic society is arranged in groups, either the state or smaller than the state, which have complete control of industry. In this way they hope to abolish the wage system and all the evils attendant upon it, money and the difficulties of circulation. They would abolish trusts, for the state would become one great trust which would order the amount and kind of production, establish each one's share of the natural product, and regulate all industrial, social, and educational affairs. They hold that this ideal system might be established at once if the people would but resolve to enter upon it. Believing in this system, they are opposed to the old method of political economy, and will listen to none of its teachings except those which advance their system.

Socialism has helped to point out the evils of modern economic society, and to that extent we recognize its services; but it has failed in providing an adequate remedy

for the evils that exist. In thus pointing out the evils of society and railing at the present constitution of things, they agree with the anarchists; but in their remedies these two groups of agitators disagree, for the anarchist desires no government, or the least possible, while the socialist desires the most possible.

In order to explain fully the meaning of this ideal system, a brief sketch of the rise and progress of socialistic ideas will be given.

The Adjustments of Social Order.

Since man began to think at all about social life, reformers have not been wanting who have set forth ideal systems of social order. These reformers, earnestly seeking the improvement of human society, have been of widely different character. There have been merely social writers, who have set forth a better standard of excellence in governmental affairs; there have been pure idealists, with impracticable plans; and genuine social reformers, who have devised and executed plans for the improvement of the race. The Jew, the Greek, the Roman, and the Teuton, each had an ideal system of government, and each separate nationality has had its ideal philosophers in matters of social order.

Moses was a reformer of the better class. He organized the Hebrews into a great commonwealth on the basis of justice and equal rights. He talked very little about a republic: he went to work and made one. He pointed out the duties of citizens to one another, and taught them right principles of association in public life. In fact, he took a rude and barbarous people, just out of the bonds of

slavery, and created out of them a well-organized nation in which the rights of property were clearly defined and the protection of life and limb fully practiced. The system of government set forth by Moses was the greatest and most enlightened of all the systems of antiquity. Such was its force and influence that its best principles have come down to us, and are exhibited in the rights and privileges of a free people.

Greek Ideal.

In Greece, Lycurgus and Solon codified and improved the laws of their countrymen, and Aristotle wrote a book on civil polity, setting forth the best ideal government of his day. He was a practical social philosopher. He wrote on various forms of social government and social order, pointing out that which was best and that which was worst in government. The politics of Aristotle represents to-day the most profound ideas of civil polity and social order ever conceived in any nation.

But it remained for Plato to give to the world the first ideal system of politics based upon pure theory. In the full enthusiasm of youth, beholding the defects of the Grecian government, he wrote a book called the "Republic," in which he pictured man as living in a state of social perfection,—a state entirely different from that which existed in Greece in Plato's time. While Aristotle had based all his assumptions on the actual, the real and the historical, Plato in his "Republic" failed to do justice to historical reality. The "Republic" is a book grandly original in conception and beautiful in execution, but it advocated principles of government that have never yet

been realized, and indeed which seem impossible to realize until society has vastly changed its condition. Its author held that the chief end of man was to perform his duty within the state; he was to be absorbed into the state. The highest good of man was sought in the suppression of the individual for the sake of social order.

While Plato understood with the utmost clearness that the character of any state must depend upon the character of the individuals who compose it, and that a state would be no better than the citizens of which it is composed, yet in his desire to carry out unity and symmetry under a particular system he ignored and suppressed the individual man. The picture which he presents to us is that of an ideal aristocracy, in which every part is complete and all its members laboring in harmonious contentment. There were some extravagant ideas of common property, common life, and community of family life; yet the prime object of the whole was to insure righteousness, justice, and morality. Without doubt Plato knew that his book presented an ideal plan, and that he never expected to see a government such as he pictured in his "Republic" prevail in Greece until the character of Greek thought and Greek life had greatly changed from what it actually was in his time.

Plato laid the foundation of modern socialism. Of the long line of idealists who have pictured to us what a perfect government ought to be, Plato stands at the head. And the numberless philosophic dreamers that have followed, owe him a debt, for setting forth principles of ideal systems of government beyond which none of them have ever traversed very far.

Roman Practice.

The Romans were a practical, stoical people, who dwelt not in visions and dreams nor ideal systems of government. They wrought out an empire through the strength of law and by force of arms. It was not until the church had added its strength and its life to the declining Roman Empire that we find developed theories concerning ideal governments. It was in the fifth century that St. Augustine wrote "The City of God," in which he compared the state and the declining empire of Rome with the ideal government of God. His ideal government was represented by the Church of Christ. He held that the system of God which sprang up and grew alongside the kingdoms of the earth was the ideal kingdom of this life, and that it would gradually draw all men to it on the basis of fraternity, equality, and righteousness. It was but the prophecy of the expansion of a system which had already been created and whose foundations had been deeply laid. For centuries, through the influence of these ideas set forth by St. Augustine, men have sought to find an ideal government under the management and organization of the Christian church. In this they were doomed to disappointment; but we may trace the origin of modern Christian socialism to the basis of this commonwealth advocated by St. Augustine.

Thomas More.

Next to Plato, the man who was most successful in representing an ideal system which had a great influence on the thought of his time and upon all utopias since, was Sir Thomas More, who represented man as living in a perfect social state. Beholding the injustice and corrup-

tion of the government of England which had grown up under arbitrary power of kings and lords, he pictured an island government, different from that of England, in which peace, righteousness and absolute justice prevailed. This ideal nation numbered about three or four millions of people, living a simple life without private property. The officers, elected by the people, fixed the duration of labor, and settled what the labor should be. This disposed of the case of production. The question of the distribution of goods was left untouched, because, as he states, in a nation where wealth was abundant and justice reigned no one would desire more than his share of the property. He said it is fear of want that makes injustice, and if this could be disposed of, then justice and righteousness would reign. In regard to the social life, he modified the institution of marriage and the family very little. He held that the adoption of children would be largely practiced, in order to keep families all very nearly equal in size. If excessive increase of population occurred, it was to be dealt with by emigration. In this respect he went not so far as Plato, who taught that the state ought to take exclusive charge of the rearing of children upon a scientific basis, producing that kind which was most desirable in the community. This presentation of the ideal government by Sir Thomas More in his "Utopia" was a scathing criticism upon the English government of his time. It is hardly probable that More had any idea that his dream—this picture of what a government ought to be under a condition of perfect justice and righteousness in humanity—would ever be realized. It was one method of representing the blackness and corruption of a wickedly and

weakly governed people. But it stands to-day in history as the representation of the first well-presented system of pure communism. It is only a step or two from the Utopia of Sir Thomas More at the beginning of the sixteenth century to the development of French socialism in the middle of the eighteenth century, but over two centuries of time rolled away,—centuries filled with changing events.

Prevalence of Old Systems.

In spite of the ideal systems of government, the nations of the earth continued with their old forms, some growing worse and others better. England developed a more enlightened constitutional government, while France rushed headlong into imperialism. France soon became the type of imperial government in which the king claimed to be the state and assumed that all people existed for his sake. There finally arose in France a large number of philosophers who, dissatisfied with the existing order of things, quietly pointed out the defects of the government of the monarchy in France. But the kings and the nobles disregarded the faint warnings of the philosophers, and regarded not the cry of distress of the people. The worst features of ancient despotism had been revived. It gave neither scope nor support of social life; it guaranteed no real freedom. The great mass of the people were regarded as serfs, to be ruled at the pleasure of the aristocracy. The old forms of the Church, of the middle class and of the peasantry, still remained, but they were without representation and without power. The edict of kings, set forth with arbitrary sway, controlled the liberty of the people. The people, smarting and groaning under

the lash of the Church and the nobility, had learned to hate their masters. The Church had absorbed the best property of the commonwealth, which remained untaxed. The potentates of the Church and the nobles circled around the king, and were supported by the grinding toil of the common people. The great mass of artisans were crowded into the thickly populated and dingy shops, where they worked incessantly for small wages, endured great suffering and experienced much inconvenience. The condition of the peasantry was even worse. In some parts of the country the tillers of the soil were a race of serfs, ground down by rack rents, feudal oppression and injustice, and subjected to all forms of abuse, being reduced frequently to the very verge of starvation. Others, somewhat more comfortable, were subjected to vexatious laws, administered with harshness and injustice by their superiors.

Finally there came a time when the accumulation of evil was greater than the nation could stand. Short-sighted philosophers and agitators, observing the condition of affairs, began to look about for the cause, and found it in the imperfection of social organization of the government. They therefore thought if the government was the cause of the evil, the only way to reform was to dispose of the government. They must tear down the present structure and build anew from the foundation. The spirit of their philosophy was caught by the infuriated mob, and the French Revolution came with all its terrors and bloody deeds. It was in this period that socialism again appeared as the solution of the problem of social order.

Modern Communism.

Its first chief advocate was the communist, Babeuf. He had been preceded by Moreillet, who in his code of nature taught that man by nature possessed every virtue and was only depraved by the influence of bad institutions, and that the worst of these bad institutions was that of private property. He held that the degradation of poverty, on the one side, and the enervation of riches, on the other, were two causes which kept men from being industrious. And he held that every person should contribute to the state according to his strength and wealth, and that in turn the state should support him. Mably followed this writer, and held that the establishment of property in land had been the great source of avarice, of ambition, and of vanity.

While the French Revolution had for its war-cry, "Equality and fraternity," Babeuf and his followers held that the only way to establish this equality and fraternity was to abolish private property and pass into a state of pure communism. Hence in 1796 Babeuf organized his band of "equals," who wished to overthrow the state government and reestablish it on a purely communistic basis. His theory concerning government was that the aim of society was the happiness of all, and that happiness consisted in equality, and that there was no way in which happiness could exist unless perfect and absolute equality reigned. He held that inharmony would prevail if a single individual in the world was richer or more powerful than his fellows. And Babeuf and his followers were ready to make any sacrifice whatever for the sake of this equality. They said: Let all the arts perish, if need be,

provided we retain real equality. They held that nature had given to every man an equal right to the enjoyment of all goods; yet they proposed to obtain this equality by coercion. A large national property might be obtained by seizing the property of corporations and public institutions, and this could be added to by gifts and by continued absorption until the government should own all the property and all the means of production. The people were to be divided into different groups of laborers, and each assigned to his particular group. All social conditions, save those relating to sex and age, were to be abolished. Equality having been gained universally, all must be dressed alike, all must eat the same quantity of the same kinds of foods; and all must be educated alike, and all education must be restricted to the elementary branches, that inequality might not continue to exist. Even the children were to be removed from the family at an early age and brought up together, in order that they might be trained in the principles of communism and educated on the basis of equality. The whole scheme seems dreary and monotonous enough. Everything was contrived to level the people down and not to elevate them, to bring the highest down to the plane of the stupid and self-contented of a lower order.

Étienne Cabet.

From this dismal picture let us turn to Étienne Cabet, the son of a cooper, born in Dijon, France, 1788. A well-educated man, he practiced law for a while in his native city and subsequently in Paris, and finally became attorney-general for Corsica in 1830; but he lost his place in the following year, on account of his fierce opposition

to the government. The remainder of his life was devoted to politics, literature, and communism. He wrote a popular history of the French Revolution, and published a journal in which he advocated moderate communistic principles. For some of his utterances he was condemned to two years' imprisonment. But escaping, he fled to London, where he became acquainted with Sir Thomas More's *Utopia*, which made a deep impression on his mind. He returned to France in 1836 and published his book, entitled "*A Voyage to Icaria*." In this he describes a country previously unknown, quite as large as France or England, but more populous and a thousand times more blessed. "Here crimes are unknown; it is a second promised land, an Eden, an elysium, a new terrestrial paradise." The whole book was a philosophical social romance, a dream of dreams. Cabet, who had many followers in France, was challenged to put his theories to the test, in answer to which he organized a colony for settlement in Texas. Failing to make a lodgment in this wilderness, the company passed up the Mississippi and settled at Nauvoo, in Illinois, a place which had recently been vacated by the Mormons. Subsequently he passed into Iowa, and founded the town of Icaria. Cabet returned to St. Louis, where he died in 1856. But the town of Icaria continues to exist to the present time, although but a year ago it passed into the hands of a receiver for the sale and distribution of the property. Thus ends one of the most romantic and interesting attempts at communism known to history. The people of Icaria dwelt and toiled together many years, sowing seeds and harvesting crops which they put into a common granary. The men all dressed alike in blue duck

suits; they went to market in blue wagons drawn by ox teams. They lived a rude, homely, peaceful life; but the rising generation, stirred by thoughts of modern life, by a desire for progress and change, could no longer be held slaves to an ideal system. For how different was this rude picture of this slow-going community from the dream that had been presented! It may be a noble thing for men and women to withdraw from the sharp competition of individual interests and combine themselves in an organization based on equality and brotherly love; it is a beautiful picture to see in our visions and dreams a group of people living in ease and elegance, happiness, peace, and perfect harmony: but how different from the cold, dreary, prosaic, monotonous life of the actual reality! And this contrast, together with the desire to be men and women, on the part of the younger members of the community, to mingle freely with others in the pursuit of happiness, pleasure, and wealth, was sufficient to cause the system to break down by its own weight.

Cabet advocated a general transition to communism. He thought it would take fifty years for such a transition. The principle of the organization was simple enough. Cabet says: "If we are asked, what is our science, we reply fraternity; our theory, fraternity; our system, fraternity." Cabet was the first and greatest pure communist of France, and Icaria the most ideal community ever in practice.

Modern Socialism.

Saint-Simon was a socialist. He held that individuals should organize themselves into natural associations for the purpose of carrying on production and distribution.

The communist believes in equality; the socialist in distributive justice. Saint-Simon held that men were naturally unequal, and that this inequality was the very basis of association and an indispensable condition of social order. He and his followers, then, rejected the system of community of goods, for this would be a manifest violation of the doctrine which they taught, namely, that the purpose of all social institutions should be the moral and physical amelioration of the most numerous class; that all privileges of birth, without exception, should be abolished, and that rewards should go to each according to his capacity, and each capacity estimated according to its works. The followers of Saint-Simon were diligent in their efforts to improve the lot of the people and to relieve the distressed, but except in theory they ended in failure.

Fourier.

Fourier held doctrines similar to that of Saint-Simon. The principles advocated by the followers of Fourier were lofty, noble, and generous in the extreme. They held as the essential duty of society and of every individual to regulate their conduct so as to produce the greatest possible benefit of humanity, and to make this the consistent object of all their thoughts, words, and actions. The perception of this duty was dictated to the sages of all times in the following precepts: To love truth as one's self;—To act toward others as you would wish them to act toward you;—To give a common support to one another;—The perpetual and gratuitous assistance from nature proves that man, by the very fact of his birth, carries and never should lose certain natural rights in the wealth that is produced. Hence it follows that the weak have a right to

enjoy what the processes of nature and the public prosperity place at the disposal of man, and that it is the duty of the strong to leave to the weak a just share of the general product.

The influence of Fourierism was very great in America. Many prominent people, taking up the beautiful doctrine advanced, tried to put it into practice on American soil. Among those who encouraged it were: Horace Greeley, Charles A. Dana, Albert Brisbane, George Ripley, Dr. Channing, and Margaret Fuller. Altogether, thirty-four experiments of Fourierism were made in America, all of which failed or are to-day in a rapidly declining condition.

State Socialism.

I must refer to one or two other French socialists. Louis Blanc was the first to join social and economic reform to politics; he was the first state socialist. Saint-Simon and Fourier were merely economic and social reformers. They were not politicians or political organizers; they appealed simply to brotherly love and to justice, and sought to overthrow self-interest. Louis Blanc assumed, as his prime principle, the right of every man to labor, and he therefore held that the government should build workshops for the employment of the unemployed. Though of great influence at the time, his career was short-lived. But it is strange to note how he impressed upon so many followers in so short a time the great importance and righteousness of his scheme. He found the aim of life to be happiness and development; happiness and development combined, he taught, can only be obtained when the state takes hold and regulates social industry. He says that fraternity means we are all common

brothers of one great family, and that it is ordained by God himself that man should produce according to his wants. This was his formula of perfection and justice, and to this end he thought the state ought to acquire public property by degrees, and after a long time it would grow into a state of perfect socialism. The whole plan rested upon distributive justice. It is true that there are places in the world that need large natures and fine intellect; there are likewise humble positions which must be filled. It was a happy ideal that all people could labor together as one great family in the higher and lower degrees, and each one receive compensation according to the service performed and have his wants supplied according to the station which he filled. It was one more golden dream to be added to the category of the many which had philosophized about a paradise on earth.

Anarchism.

Proudhon followed Louis Blanc. He hated the rich, but he felt for the poor, and desired to bring about a social state which would be of great assistance to them. He desired to level all organizing power and to develop perfect individuality. His theory was contradictory, for the supposition assumes that perfect collectivism and perfect individualism can exist at the same time. He startled the world by asking, "What is property?" and gave the more startling reply, "Property is theft, and property-holders thieves." Proudhon was an anarchist. What was the ideal government in his eyes? No government. He desired absolute liberty. He rejected communism, but adhered to the prime principles of socialism, and held that property was the suicide of society. He was an earnest,

sincere man; he loved the people, and sought to improve their condition. He said: "O God of liberty, may my memory perish if humanity may but be free! If I may but see, in my obscurity, the people finally instructed, if noble instructors but enlighten them, if disinterested hearts but guide them!" This ideal anarchist philosophized a government out of existence; the practical anarchist seeks to destroy by force. The one has a beautiful theory, the other proposes a horrible actuality.

German Socialism.

Brief mention must be made of the German socialists represented by strong natures like Ferdinand Lassalle, Rodbertus, and Karl Marx, who have mingled the doctrines of economic life with politics and developed the social democracy of Germany. They have been, as a rule, closer students of human society and economic principles than the French; they have been more systematic, more analytic, but not less earnest in the advance of their theories. They have laid great stress on the fact that labor is the source of all wealth, and that the proportion of goods falling to the laborer as production advances is continually decreasing. I have not space to mention the modern German socialists, one branch of which is led by Bebel and the other by Liebknecht, and the growth of social democracy in Germany. Worthy of mention are the influence of Robert Owen in England in the early part of this century in developing communistic coöperation, the later societies in England for the advancement of pure socialism, and the recent growth of the socialistic labor party. There should be recorded also the history of the progress of these ideas in America, and the attempts that

have been made to establish communism, socialism, and anarchy in our own country. The works of such men as Bellamy, the great advocate of state socialism, of Henry George, the advocate of nationalism in land, and of the Christian socialists that have sprung up in recent days, are all worthy of mention.

Socialism in America.

No one can ignore the rapid growth of socialism in America, nor minimize the social tendency of this age. Such classes of persons, who not only insist on the government of monopolies but also believe that the government should own all productive processes, are constantly increasing. They hold that the railroads and the telegraphs, canals and water-ways, gas-works and electric lights, farms, timber lands, mines, mills, factories, and stores,—in fact, all industrial enterprises,—should be under the immediate control of the government. This is pure socialism, and carried to its extreme limit abolishes the wage system and establishes an equitable method of distribution. Others go so far as to advocate that all competition should be abolished, and that subsistence and support be guaranteed without protest to every individual.

This is the ultimate conclusion of pure socialism. The ranks of this army of idealists are recruited by people of widely different characters and conditions of life. There are those whose motives for a better life for all humanity are not to be impugned, any more than the motives of those who think that free competition, which gives a free and full play of humanity, will yield the highest and best return of human profit and happiness. They realize more clearly to-day than ever before the imperfections of human

government, and present with greater earnestness the ideals of perfect society. The idealists are impressed more forcibly than ever before that a perfect society could be realized if the people only willed it. They are seeking the highest good of the greatest number, and are ready to sacrifice health and fortune for the advancement of these ends. Deceived they may be by the socialistic mirage, yet their earnestness and sincerity cannot be successfully denied.

There are also found within this group of recruits to the army of socialism, people who represent the basest and most irritating forms of human selfishness. They desire state ownership of industries that they may receive more from the community than they are entitled to receive. They desire a new régime that they may be in a position to profit from the toil of others. It is the same sort of selfishness which prompts the individual to seek piratical freedom which will enable him to possess all that he can of this world's goods, by fair means or foul, regardless of the sufferings of others. The very selfishness of their own hearts makes them cry out against the selfishness of others.

The ranks of the socialistic army are also daily recruited by people who started out fearlessly and honestly for a respectable position in social life, and having been defeated in their combat, are discouraged and despondent. When they find many others in the same condition as themselves, they believe that there is something radically wrong in the nature of affairs when patience and honest endeavor fail to reap their just reward. They observe that part of the people are happy and prosperous, and a part, like them-

selves, miserable and poverty-stricken. Victims of the teachings of the demagogues of the selfish class, they hastily conclude that this difference of condition is due to the unjust principles of social organization, and they turn instinctively to the state for the redress of grievances, believing that it has the power to equalize conditions of life.

Inadequacy of Socialism.

We observe, then, that there is nothing particularly new in this modern doctrine of socialism; it has historical foundations. The socialism of to-day is founded upon the accumulated error of past philosophy and present practice. Before closing this chapter, let us leave for a short time the historical current of its onward sweep, and ask briefly, What are the defects of its philosophy, and what are the remedies for the evils which it points out? Granting that many of the evils which these idealists have pointed out to us are real; granting that their beautiful theories and their optimistic plans have given us at times enthusiasm and warmed our hearts; acknowledging that they have had some influence over the philosophy of modern government and are having it to-day;—what are the defects of their system?

In the first place, the evils which the socialists have pointed out have been greatly exaggerated, and the times have been pictured to be much worse than they really are. Our industrial system under present conditions is not an unmixed evil. The changes which it has wrought through invention and discovery, by working immediate injury to some will work final benefit to all. The rapid movement of productive enterprise leads to much irregularity in the

business world and gives rise to much distress,—nevertheless, society is in a much better condition to-day than ever before; and if we consider the evolutionary process by which society develops, we shall find that justice and equality are more nearly approximated to-day than ever before. The search-light of modern investigation, coupled with the diffusion of learning, has enabled us to see things more clearly as they are. Consequently, we behold more clearly the nature of the evils which society has to combat. If we are faithful in searching out the evil things which society has to combat, let us be faithful also in searching out and magnifying the excellences of modern economic and social life, and we shall see the advantages of our modern system.

Again, even if the evils which the socialists portray were greater than they have been represented, there is no assurance that extreme socialism would remedy the defects of rank individualism. Socialists have been guilty of taking a partial diagnosis of the case, and consequently have proposed inadequate remedies. In their zeal to reach an economic millennium on earth they have read history carelessly and superficially and have interpreted it falsely. They have selected from a few economists those systems which best suited their system, and with insufficient data have reasoned illogically. They have juggled with half-knowledge, from which they have attempted to deduce general principles. Granting that the healthy and voluntary coöperation of industrial classes is essential to all good economic progress, and granting, too, that there is a continued tendency to monopolistic power in production as well as in distribution, they have failed to prove that

it is necessary for the government to own and manage all resources of industry in order to secure to the people the benefits of this monopoly arising out of excessive free competition. They have furnished no guaranty whatsoever, or even a strong probability, that socialism could regulate the disorders of economic life.

Perhaps one of the weakest points in the system offered by the socialists arises from the fact that they offer no definite plan for the rapid transition from individualism to socialism. They simply state it will be so, and expect people to accept the system. One of the most prominent socialists of the United States in making an address a short time since drew a fanciful picture showing how socialism would be accomplished within ten years, and how by that time all parties would be leaving the system of competition and rushing forward to adopt state socialism. He held that the time was at hand when the capitalist and monopolist would gladly free themselves from the present ruinous practice of free competition, and elect socialism. The plan of the transition, however, was left out, and the possible results of failure were never for a single instant considered. He began his peroration with the following words: "There is a dream hovering in the air," which seemed to be a fit climax to an illogical and ineffective argument. The whole plan is a dream, which if ever realized will be to the generations yet unborn.

But people may inquire: If it is so illogical, what harm can it be to have this dream? Why not keep before the people a perfect ideal government? The harm is to the toiling wayfarer on the dusty plains who sees in the distance the mirage, and travels on with hope of presently

being in the shady groves by cool waters where rest can be obtained and thirst quenched. He comes to the spot but to see it recede in the distance, or the whole vision to dissolve. The man who is toiling to build a home for his family, and beholds year after year the failure of all his plans, sickened with deferred hope, is taught that the cause of this condition is imperfect government or imperfect industrial system, turns readily to a plan which will relieve his present exigencies and yield him what he terms a just and fair return for his labor. As a result of this belief he becomes more and more discontented with his lot, and the social world of toil becomes more distasteful to him as he persuades himself that injustice is being done him by the government. Failing to realize his hopes for immediate relief by means of socialism, he enters the field of expectancy, then of pauperism and vagrancy. Thousands go down to join the ranks of paupers and vagrants every year on account of false hopes held out to them by the theories of socialism. The evil effects of teaching a pernicious doctrine are great.

Again, socialism fails to account for the present condition of human nature as revealed by past history and present conditions. It has made no allowance for the continuance of the selfish greed of humanity. Socialism once established, will there not be an endless struggle for place and preferment, a struggle for supremacy, ending in excessive dominance of man over his fellows? And will there not be a much larger opportunity for this dominance and selfish aggrandizement than there is now? Have we any guaranty that human nature will be changed in the twinkling of an eye from hard, selfish, grasping impulse to that

of noble, brave, and generous disposition which impels the individual to share all good with his fellows? Such an assumption is a vain delusion, a dream, and could only bring about political and social revolution combined, which would end in the spilling of blood in the struggle for daily bread, a revolution such as the world has never yet seen.

The assumption that, because free competition in the industrial world has led to increased selfishness and arbitrary dominance of certain ones who accumulate great wealth from others, and that if we could change the management of all industries to the political power, namely, the state, we should be relieved from these evils, is entirely false; for it assumes that selfishness does not exist in political circles and is not manifested in the political affairs of the state. Every one knows that selfishness is more evident to-day in the common political life than in the industrial, and that selfishness occurs not only on the part of those already in power, but is just as prominent in those outside of power, who are waiting for an opportunity to elevate themselves regardless of justice to others. The political conditions of the day are indeed far worse than the economic conditions, for the former consist in the replacement of one spoils system for another, while in the economic world we do see some potent signs of the progressive regulation of principles of justice and equality in the production and distribution of goods. To place everything under a political hierarchy means the concentration of selfishness and the removal of the last check, called competition, from the field of operation. To illustrate this fact, we need only to point to the dangers of concentrated selfishness in the political management of our

large cities during the past forty years. Here we see the enlarged power of human government in the hands of individuals struggling selfishly for the largest possible individual gain. We observe frequently the same tendency in the increased centralization of our national government. While in the smaller communities of local government, where less selfishness is concentrated, the will of the people is more nearly expressed. But the political dangers of socialism are entirely overlooked by the socialists. They have not accounted for the vagaries of human nature, which have existed from the time when man first began to struggle with his fellows for subsistence.

Reforms Proceed from Local Government.

It is also to be observed in the history of the development of government that all reforms have proceeded from local conditions to the central government, and not in an opposite way. If this is universally true, are not socialists moving in the wrong direction in trying to establish a general law which shall regulate individual practice rather than trying to modify individual and local practice, thus seeking to reform the central government? Recognizing this as a natural method for all reforms, it would seem more rational for socialists who are desirous of benefiting humanity to establish themselves on some of the cheap lands of America and begin to apply their socialistic doctrine, and this would put matters to a practical test. Communists have tried this experiment again and again, and in nearly every instance have failed, until communism has become almost a thing of the past. If socialism should succeed, working along the line of natural development of reformatory methods,—from the local to

the central government,—the people of the United States would hail with joy any complete system whose success could be demonstrated. If they failed, the dream would be exploded. Economic experiments where the doctrine of socialism could be tested in practice are highly desirable at the present time. Those countries like New Zealand, which have advanced too rapidly with changes toward the state control of industries, have usually regretted it.

Another gross error into which the advocates of this system have fallen is based upon the teaching of the Gospel, which has been claimed by some as a powerful force in the development of socialism. But if the Master taught the common brotherhood of humanity and insisted upon justice and mercy, he also taught that man should not be comparing himself with his fellows as a criterion for correct life. But this age has become the age of individual, and, it may be said, invidious comparisons,—the age in which we estimate our life and our prosperity by the lives and prosperity of others, instead of having in mind the ideal life,—and this has been extended more especially into the industrial world. Now the wage-earner compares his shelter and his food, his opportunities for culture and learning, leisure and travel, with those of the millionaire, and he is soured and disgusted with the contrast. Humanity never got into a worse condition than this. The spirit of extreme individual comparisons leads to malice, envy, and crime. The assumption that with the state ownership of industries these contrasts would disappear, is idle and chimerical.

In the adjustment of social rights these facts must be regarded as fundamental to the great law of social progress. There is not only a diversity of employment in the world,

but a diversity of human capacities and characteristics; indeed, the fundamental progress of the universe rests upon this variety of life. Under a socialistic system some must be employed as officers of the state in great commercial enterprises, which means that others must do servile work, and in fact an entire gradation of employments from the highest to the lowest must continue to exist. Is it to be supposed for an instant that where the spirit of comparison of the benefits of this life exists, which is born of selfishness and distrust, of ambition and avarice, that we shall have any less inequality because of a sudden transition to state exploitation of all industries? Such an assumption is unwarranted and unfounded. Indeed, under the present status of human society, the most complete institutions and theoretically correct principles and methods are liable to abuse by men in power, and until the slow process of the regeneration of human nature reaches a higher state, until, step by step, the evil practices have been eliminated, we cannot count on any improved condition of humanity by a transition to socialistic usage.

Those who earnestly advocate this doctrine have apparently failed to observe that the social misery of to-day is not wholly dependent upon capitalistic production, for the world at large is in better condition now than ever before. And if there has been a slow evolution of justice in capitalistic production during the past century, is it not fair to assume that it is better to continue in this slow process of development rather than venture suddenly upon an unknown sea without chart or compass, and no guide save the dreams of theorists, which have been accumulating for the past two thousand years? Moreover, everybody

admits the rapidity of production under the individual system. Apparently the socialists have failed to realize that there will be an immediate falling-off in the production of economic goods the moment that state socialism prevails; and in view of the fact that socialism promises a large return to every man, how will this larger return be made possible? It is quite easy to see that a change from the present economic system to a socialistic régime would not eliminate the evils of economic society. It is quite difficult to apply the socialistic doctrine to the practical affairs of life. At best, economic systems grow; they are not made to order, nor are they thrust aside at the behest of political government.

Nature of Progress.

Progress is essential to the life of society. The struggle for existence is essential to progress. There are two pictures: one represents man struggling against external nature for protection, and against his fellows in competition; the other represents man struggling for the existence of others, and coöperating with his fellows in the production of wealth. The two blend in one genuine picture of social progress. The one represents the personal struggle for existence, the other the social struggle for the existence of others. If either be suppressed, modern progress ceases. The personal struggle for existence is essential to wholesome individual life; it is necessary for a perfect social fabric. So far as socialism suppresses or advocates the suppression of this personal struggle, it is detrimental to the best interests of social life. So far as it attempts to guarantee the support of all through a common center, and remove responsibility from the individuals

and families, so surely will the laws of social evolution be violated and social degeneracy set in. There must be a survival of the fittest to associate, the fittest to coöperate, if the social structure is to grow. This survival can only be tested by individual struggle and diversity of life.

It is properly held that nature likes uniformity of law and ignores uniformity of the species. Variety in life is essential to existence. So far as the social organism is a natural body, the same law holds good; equality and uniformity are ignored as non-progressive, while diversity and variety are deemed essential to the existence of the social body.

No Formula for Reform.

Remedies for existing evils may not be discussed fully, but it may be suggested that more attention be given to character in proportion to intellect. The highest type of coöperative individual is dependent fully as much upon character as intellect. Among modern reformers too much stress has been placed upon mere intellect as causation in social evolution, and too little upon character. Too much stress has also been laid upon the power of the general will to force social reform. Thousands of reformers crying in the market-place that something ought to be done have brought on a condition of expectancy that something *would* be done, and the individual has looked to the government, to society, to chance, and even to Providence for help, while his degenerate feet allowed him to slip into the great social residuum that exists on the borders of pauperism and crime. We need to teach and to learn individual responsibility, in the home, in the school, in the church, in the civil government. With it social responsibility will

come as a natural sequence, for individual responsibility must include responsibility of education, power and wealth, as well as the responsibility of self-preservation. This can all be acquired under the present economic régime. The system may be modified, but it will not break down.

The highest phases of culture and learning are accompanied by the worst forms of degeneration; wealth and poverty, generosity and selfishness, justice and inhumanity, virtue and vice, exist side by side. There is no patent cure for all our ills. When a man has a measure which he claims, if adopted by the government, will regenerate society, banish strife and selfishness, eliminate poverty and distress, cure pauperism and crime, one should regard it in the same light as the patent medicine which proposes to cure all bodily infirmities. Society cannot be cured by the direct application of nostrums. And it is evident to-day, as we look out at this great social struggle; as we observe the grinding of the millions in their ceaseless round of anxiety, strife and care; as we see the inhumanity of man to man, the injustice, wretchedness and crime in the world,—indeed, as we behold all this, there is but one permanent cure, and that is education. The development of individual powers, individual life, individual culture, and the preparation of that individual for the active social duties of life,—this alone will preserve the present and insure the future. But this must include the development of moral character, moral courage, and moral responsibility of the lives of others, while we insist upon intellectual quickening. We shall solve the problem of life by developing what is best in ourselves and in those with whom we come in contact. Out of this must come the regulating

power that will eliminate selfishness and bring about justice in the existing economic order.

The prosperity of a nation rests upon the character of individuals. As Mr. Lecky well said, concerning the prosperity of a nation, in his essay on the Political Value of History: "Its foundation is laid in pure domestic life, in commercial integrity, in high standard of moral worth and of public spirit and simple habits, in courage, uprightness, a certain soundness and moderation of judgment that springs quite as much from character as intellect." As these qualities and characteristics increase and predominate, the national life grows better; as they decline, it degenerates.

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PART III.

CONSUMPTION.

CHAPTER I.

NATURE OF CONSUMPTION.

Consumption Regulates Production.

The amount of goods consumed is in one sense a record of the degree of satisfaction of wants, and as demand always springs from a desire to consume, in modern economic processes the amount manufactured will depend to a large extent on the amount demanded; hence it is that consumption limits production. While no goods can be consumed until they are produced, and in the mechanical process consumption must be preceded by production, consumption after all stimulates desire. This principle is carefully observed in the causes and processes of panics. As soon as consumption falls off, or, indeed, as soon as a distrust arises that people will not consume what is produced, production ceases and there follows a trade depression. In the revival from panics it is the desire for goods, or consumption, which sets the wheels of industry going. So important is this question of consumption in relation to production, that some authors have laid it down as the first principle in economics; however, it is only

through the law of supply and demand that it takes precedence.

Consumption Inseparable from Production.

Whichever way consumption may be considered, it is inseparable from production. The whole economic structure rests upon the principle of the satisfaction of human wants. The effort of mankind to obtain material objects or goods or the services of others in satisfaction of wants, is the fundamental principle of the science. In the satisfaction, then, of these material wants, we find the formal basis of active life. The primary basis is the satisfaction of the merely animal wants, such as food, drink, clothing, shelter; these are the things that men strive for everywhere. As man's nature evolves he finds it expanding into a thousand wants and desires, built upon the economic life as the formal basis of the superstructure of civilization. Men toil to satisfy the wants of religion, to promote the moral nature and the æsthetic faculties. Considering the social conditions of mankind, we find this idea expanding into railroads, highways, sanitation, education, public parks, institutions for the care of the weak, indeed into all public needs which must be met by economic activity.

Variety of Human Wants.

In the savage state man's wants are few, and it takes his entire life to satisfy them. As civilization increases, desires multiply, wants become innumerable, and renewed effort must be put forth to satisfy them. By increased intelligence, which enables man to use the power of invention and to apply the forces of nature, he is enabled to multiply the means for the satisfaction of wants. We

seek everywhere for the qualities embodied in material objects to satisfy our needs. We also seek the personal services of others. We desire food and clothing and objects of art and beauty, and so, on the other hand, we desire to travel and to employ the services of others in conveying us from place to place.

Degree of Want.

Each individual arranges his wants in the order of their importance, but the degree of importance of the wants of different individuals varies. The chief desire of one man may be for a coat, of another for warm food, while the chief demand of a wealthy person may be a thousand-dollar painting or a five-thousand-dollar horse. The degree of intensity with which people desire certain things has a vast deal to do with the regulation of the kind and amount of consumption, as well as the development of the prices of production. As civilization progresses there is comparatively less time spent obtaining the bare necessities of life, such as food, clothing, and shelter; and more, proportionately, in obtaining those which lead to intellectual culture,—more spent in the development of the derivative qualities of mankind. In an actual social organization, education, art and literature may not be essential for the perpetuation of life or the perpetuation of the species, but they are essential to its higher development. To that extent culture is desirable. It produces a better life and a better class of people.

Satisfaction of Economic Wants.

In Political Economy we have to deal with only the satisfaction of economic wants, chiefly material goods. Such goods as nature has furnished in abundance, like

water, air, sunlight, are not economic wants; they are called free goods, and are not subject to the processes of economy. However, these have a tendency more and more to be appropriable in service or material. Water in the cities has become an economic good; also, for the purpose of irrigation, it is bought and sold. It may be that the service performed is the chief consideration, but in reality it is the furnishing of the economic good that determines the economic condition. Air pumped into mines and tunnels may become an economic good as it is bought and sold in the market, and would have under such circumstances an economic value the same as food or clothing. If sunlight should be concentrated so as to run engines, power might be developed in that way and sun-heat would become an economic good. The generation of electricity, which is free to all everywhere, when transmuted into power becomes an economic good, and electrical power is bought and sold. So we shall find that in the process of development man enlarges his sphere of activity from time to time and the purely economic goods encroach upon the free goods, appropriating to themselves goods which were formerly free.

Immediate Consumption and Final Consumption.

All goods are produced for the sake of consumption. Some of these are for immediate consumption in the gratification of wants, such as food for the sustenance of life, or raw material for the production of other goods, as coal. Final consumption is the last use of an article, and means the last use it is put to in the development of the economic process. Thus, trees are consumed in furnishing lumber; lumber passes through the planing mill and subsequently

is made into articles of furniture. The use of the furniture is the last use of the lumber. The consumption of wealth is necessary for the production of other wealth. Thus, that portion which is set apart for the furnishing of means for producing other wealth is called capital. Its object is consumption. The final consumption represents the destruction of the utility.

Productive Consumption.

Productive consumption is that in which the value reappears in the utility of the finished product. Thus, coal used in creating power passes through the process of being consumed and reappears in the value of the finished product. The coal which is used for heating purposes only is consumed in the final act; it has served its economic process there. But the economic process in production is entirely different. Many goods serve as raw materials in the manufacture of finished products; also, tools and machines are consumed in the production of other articles, the ultimate aim of the whole process. The consumption of goods by the laborer is sometimes said to be productive consumption, but this can only be true in the case of the consumption of such articles as are a necessary part of the process of production by the laborer. For consumption by man is the aim of all production; when goods have been consumed thus, their economic purpose is fulfilled, unless otherwise intended as stated.

Consumer's Profits.

In consumption all are looking for the largest use of material goods. Producers create goods for the purpose of selling in order that they may realize a margin of

profit. The consumers buy them in the cheapest market with the expectation of obtaining some advantage in buying. There is always competition in buying as well as competition in selling. While those selling hope to make good terms for themselves, those buying desire to retain the advantage on their side. Thus, competition tends to reduce the purchasing price, which would yield a profit to individuals. All distributive coöperative institutions have for their purpose the making of profits, which arise from careful purchasing for the consumer.

References: See following chapter.

CHAPTER II.

CONSUMPTION AND SAVING.

Analysis of Consumption.

It is held by some that consumption, being essentially an entire destruction of utilities, is always accompanied by a saving process; viz., as to what will yield the highest return on money expended. In consumption, people are always studying as to what most advantageous use wealth may be devoted, and then there follows another proposition of how this may best be demonstrated. There could be a better ordering of the methods of consumption without any real retrenchment in the amount consumed. It requires a careful study as to what should be used. Economy in consumption is a very important subject; and by that we do not necessarily mean abstinence or niggardliness, but a careful and thoughtful study of how to get the largest return for the expenditure.

Engel's Law.

A careful study of the statistics of consumption shows that there is a relative order of expenditure for different individuals. Various investigations have taken place in Europe and America to show the relative per cents. of income expended in the different ways for food, clothing, rent, fuel, etc. The first definite results of investigations were published in 1867 by Dr. Schwabe, chief of the Municipal Statistics Bureau of Berlin, on the relations

between rent and income. The following table summarized his results:

<i>When the income is:</i>		<i>Then the expenditure for rent is:</i>			
900 marks,	.....	216.09 marks,	or	24.10 per cent.	
1,500	"	231.65	" "	22.10	" "
2,250	"	450.00	" "	20.00	" "
3,000	"	825.50	" "	27.50	" "
4,500	"	1,052.55	" "	23.39	" "
6,000	"	1,203.60	" "	20.56	" "
9,000	"	1,566.00	" "	17.40	" "
15,000	"	2,020.50	" "	13.47	" "
30,000	"	2,760.00	" "	9.20	" "

This social law, which states that "the greater the income the smaller is the proportion expended for rent," has often been called Schwabe's law—"das Schwabesche Gesetz." Later, Dr. Engel of the Royal Prussian Bureau extended this "social law" to all the necessities of life, and in its more expanded form the law is usually called "Engel's law."

As income increases, the relative expenditure in the different lists changes; but there are certain constant laws of relations of expenditure, derived from statistics. These are mainly as follows:—First, the law of constant percentage: as income of family increases, the percentages of expenditure for clothing remain approximately the same; expenditures for rent, fuel and light remain invariably the same. Second, the laws of variation: as the income of the family increases, a smaller percentage of it is spent for food. As the income of the family increases, a steadily increasing percentage is expended for education, health, recreation, amusement, etc.

Of a large number of cases in Germany it is shown that the per cent. spent for clothing ranges from 16 to 18, in Europe from 14.8 to 19.8, while in the United

States the clothing expenditure ranges from 12.82 to 16.84, showing a slight variation in the changes of income. While rent in the United States is from 12.59 to 15.98 per cent., it is from 9.38 to 11.93 in Europe. It is seen by this that the subject of rent varies somewhat, though it may be regular enough with clothing to be included in the constant or relatively constant laws. Food varies from 50 to 62 per cent. in Germany, 44 to 50.06 per cent. in all Europe, and 28.63 to 49.64 per cent. in the United States. The following tables illustrate these laws. They also point out a great lesson in social economics: that the wants of higher civilization caused by education and a higher standard of life are not satisfied with the present economic or industrial system. The ordinary family still has insufficient income over the bare necessities to satisfy desires to the extent of producing happiness and contentment. The reform should begin with consumption, if the individual is to satisfy common wants and have a margin for the satisfaction of extra desires.

PRUSSIAN STATISTICS.—ENGEL'S LAW.

<i>Items of expenditure of a family of the middle class.</i>	<i>Percentage of the expenditure of the family of a man with an income of from —</i>		
	<i>\$225 to \$300.</i>	<i>\$450 to \$600.</i>	<i>\$750 to \$1,000.</i>
	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>
Subsistence	62.0	55.0	50.0
Clothing	16.0	18.0	18.0
Lodging	12.0	12.0	12.0
Firing and lighting	5.0	5.0	5.0
Education, public worship, etc.	2.0	3.5	5.5
Legal protection	1.0	2.0	3.0
Care of health	1.0	2.0	3.0
Comfort, mental and bodily recreation	1.0	*1.5	3.5
Total	100.0	100.0	100.0

* This should be 2.5, to make even per cent.

PERCENTAGE OF EXPENDITURE FOR FAMILIES OF DIFFERENT INCOMES.

<i>Object of expenditure.</i>	<i>Income under \$200.</i>	<i>Income \$300 to \$400.</i>	<i>Income \$500 to \$600.</i>	<i>Income \$700 to \$800.</i>	<i>Income \$900 to \$1,000.</i>	<i>Income \$1,200 and over.</i>
UNITED STATES.						
Rent.....	Pr. ct. 15.48	Pr. ct. 14.98	Pr. ct. 15.15	Pr. ct. 15.60	Pr. ct. 14.96	Pr. ct. 12.59
Fuel.....	7.07	6.04	5.63	4.42	4.00	2.57
Lighting.....	1.01	.98	.97	.88	.74	.45
Clothing.....	12.82	14.14	15.27	16.33	16.84	15.71
Food.....	49.64	45.59	43.84	38.89	34.34	28.63
All other purposes.....	13.98	18.27	19.14	23.88	29.12	40.05
EUROPE.						
Rent.....	9.38	11.93	10.26	9.49	10.49	.....
Fuel.....	5.38	5.49	3.32	3.97	5.19	.....
Lighting.....	1.66	1.59	1.37	1.20	1.53	.....
Clothing.....	19.08	14.18	15.21	18.97	14.15	.....
Food.....	48.32	49.58	50.06	44.00	46.24	.....
All other purposes.....	16.18	17.23	19.78	22.37	22.40	.....

It will be interesting to study the following comparative percentages of expenditures of the families of working-men in Illinois, Massachusetts, Great Britain, and Prussia.*

<i>Items.</i>	<i>Illinois.</i>	<i>Massachusetts.</i>	<i>Great Britain.</i>	<i>Prussia.</i>	<i>Average.</i>
Subsistence.....	41.38	49.28	51.36	55.00	49.25
Clothing.....	21.00	15.95	18.12	18.00	18.27
Rent.....	17.42	19.74	13.48	12.00	15.66
Fuel.....	5.63	4.30	3.50	5.00	4.61
Sundries.....	14.57	10.73	13.54	10.00	12.21
Total	100.00	100.00	100.00	100.00	100.00

While the table shows in a rough way the comparative percentages of expenditure, in another way it determines but little. Take the item of subsistence, for example: it is not shown whether the family in Great Britain that expends 51.36 per cent. of the income for food is better or worse fed than the family in Illinois that spends 41.38 per cent. for the same, but it shows that the largest item of expense in Great Britain is food. The table shows that

* From Ely's Outline of Economics, p. 245.

rent is a greater item of expense in Massachusetts than in Germany or Great Britain, but does not show how the family lives. While there is a tendency everywhere for a family of certain grade to seek the same relative home in proportion to income, it is not sufficiently constant to show any positive relation. Are rents higher in Massachusetts than in Great Britain for the same quality of house?

Inducements to Save.

Inducements that persons have held out to them for saving are, that the same articles may be consumed in another way, yielding a larger amount of satisfaction. When the standard of life is once established, it requires a certain amount of various articles to satisfy it. If the standard is raised, there must be a larger expenditure in certain lines for its satisfaction. Economy in this respect consists in saving from useless or needless expenditure, with the expectation of receiving a larger benefit from the goods expended in some other way.

Spending and Saving.

There are those who hold to the doctrine that spending should be practiced freely in order to make times good; that is, the more we spend the greater will be the circulation of money and the better will trade be. This, however, has its limitations. Money expended in the gratification of rational wants, it is true, will lead to rational production and proper consumption; but money or wealth expended in uselessness may create as much evil as good, and if all were to squander alike with prodigality there would be no wealth used for the purpose of carrying on the processes of production.

Luxury.

The term luxury is relative. In an economic sense it must be confined to extravagance and prodigality. There is no general law telling what luxury is, for luxury to one person might not be luxury to another. The luxuries of one individual may be the commonplace articles of another, and the luxuries of one generation may become the necessities of the next. The money that is expended in riotous living is a direct waste, and the money expended in excessive luxury might be devoted in a larger return to society. The millionaire's palace might build a hundred good homes for people of ordinary means and taste, and it is a question whether his life-work demands any such outlay, or whether it is necessary for his best interests. Viewed in this light, it appears that much of the expenditures of life are useless. The luxurious wine supper cannot yield a sufficient pleasure for the amount of waste incurred, hence it is a luxury. Whisky, beer and tobacco are worse than luxuries,—they are a waste, because of the evil effects on the body. The wants of a community are never satisfied, for as we go on developing we increase the number of our unsatisfied desires, which are limitless. Luxurious expenditure can only be justified when results are obtained in proportion to the sacrifice. A man might burn a house for the sake of amusing himself with the play of the flames. It is evident that the small amount of gratification has cost a very large expenditure, and is out of all proportion to real economic consumption. Though the house were his own, he would violate moral obligations in consuming materials which had cost years of labor and might be made useful in many ways.

Economic Expenditure and Waste.

The person who, having to consume articles of usefulness, does this in a careless and wasteful manner, violates his moral obligations to the community. Hence the human race would be greatly benefited if we could have economy of food consumption. Now economy of food does not mean that the body should be stinted, but only means that economy should be used in its selection and in the proper preparation for its proper use. Thus we should have the largest return for the expenditure. This is what is meant by saving; it is not hoarding articles for the purpose of gratification of bare possession, but for the purpose of seeking out the largest return for goods in hand. Therefore, when persons put money in savings banks it is for the purpose of getting a larger return in some other way than by the gratification of present desires. If a person refrains from buying a hat when he does not really need it, it is for the purpose of spending the money for some want yet unsatisfied. Hence, saving is a relative term, and economy is economy in use. In the use of food, for instance, there might be selected expensive foods containing little real nutriment; or foods might be selected which would not satisfy the wants of the family; or food could be wasted, thrown away, and badly prepared; and again, there might be a great deal of expensiveness in its preparation. All of these things are absolute waste.

The Desirability of Saving.

There are very many reasons why saving represents an economic advantage. It teaches the individual thrift and frugality, including habits of caring for himself, which is an insurance against the destruction of labor by poverty

and sickness. It is an insurance against reverses in business, which tides the individual over in times of apparent stress, but it also enables the use of large amounts of wealth in a productive enterprise which otherwise would be consumed at once. Nevertheless, the question of saving may be carried too far. If one continues to save to the detriment of his everyday business or his everyday work, it may be in the long run a hindrance to economic progress. Sometimes saving is carried on to the extent of impairing a business by diverting free capital from one channel into another. Examples of this kind are found where excessive life insurance is taken, or where a business is entered which requires excessive payments or assessments.

It is sometimes argued by individuals that it is a good thing to spend, because it puts money into circulation and makes times good. While this is not a good argument taken as a whole, there are elements of truth in it. A community may be crippled by diverting free capital into channels for the purpose of yielding an ultimate benefit, but which in reality is at an expense of prosperity. If there is a large amount of manufactured goods on the market, the consumption of these goods will have a tendency to quicken the wheels of industry in old established lines and create a surplus of income which may be used to create new business. But if by strict economy living expenses were cut down one-half, consumption falling off to the same extent, in order to save this amount from a given enterprise to expend in another business which would take years for an income, it is plain that the community would suffer loss. It is a good thing for a community to live well, to keep up the standard of life, for this is true economy. Such savings as may be had over

and above this good living will not only be an immediate but an ultimate advantage to the community.

National Consumption.

National consumption is a better estimate of national prosperity than national production, if different groups of individuals are considered. It is what an individual has and enjoys that estimates his standard of life. When we say that the per capita wealth of the community is \$1,000, we mean that the accumulations or savings of wealth amount to that much. Now in what form do we find this wealth? It is in money, lands, houses, furniture, clothing, books, machinery, implements, etc. It means that we have that amount at hand not consumed. Nevertheless, nearly all of this is in the process of consumption. If all of these goods could be stored in a warehouse awaiting the use of the people and there was no demand for them, it is easily seen that the wealth of the community would be small. It is through consumption that the value of all goods is estimated. If consumption were to keep up with production, day by day, there could be no such thing as national wealth, and from the fact that consumption does not keep up with production we have a surplus on hand which is called capital. This accumulation is dependent upon the excess of production over consumption.

It still remains true that the prosperity of a nation is dependent upon the perpetual use of this wealth in legitimate consumption. In other words, the condition of national consumption, that is, the use of all the surplus earnings of a nation, will be an index of the national prosperity. Hence it is the height of economy to encourage legitimate consumption of goods. Therefore the legitimate

consumption of wheat, corn, clothing, furniture, houses, and in fact all goods, will be an index of the prosperity of the nation. Care should be used to discriminate between the large service of goods and the waste of goods. Everything must be put to its highest possible use if we wish to reach the highest prosperity. If a large part of the surplus earnings of a community passes into savings, it may thereby curtail expenditure in such a way as to destroy the well-being of the community. While the encouragement of saving by individuals in the form of life insurance or laying up funds for future use may in the long run lead to greater opportunities for the support and production of life, yet even this may be overdone to the extent of destroying the working funds of the community and detracting from its well-being.

In the United States, enormous consumption of goods has as much to do with the prosperity of the nation as the excessive industrial power which produced the goods. While the opportunity to consume goods must logically follow the production of the goods, it is after all the stimulus to production, and after all the evidence of the well-being of the community. The following table illustrates the national consumption of certain classes of goods in the United States, for the fiscal year 1905.

<i>Article.</i>	<i>Production.</i>	<i>Home Consumption.</i>
Wheat.....	552,399,517 bu.	510,985,324 bu.
Cotton.....	6,994,281,731 lbs.	2,749,291,082 lbs.
Corn	2,464,480,934 bu.	2,377,202,894 bu.
Pig iron	22,992,380 tons. (Calendar year 1904)	16,561,277 tons.
Coal.....	314,562,881 tons.	244,051,103 tons. (Bituminous)
Wool	295,488,438 lbs.	542,062,536 lbs.
Malt liquors, and dis- tilled liquors	1,718,203,292 gals.	1,694,392,765 gals.
Sugar	584,888 tons.	2,632,216 tons

It is evident that the large amount of the consumption of liquors must be to a great extent a detriment rather than an advantage. And also the waste in the use of flour or meat in the home consumption could not be considered in an estimate of well-being, but that this produce represents the possibility of well-being to the nation.

Reform in Consumption.

As consumption influences production, the improvement of the economic methods will be more readily made by reforming our system of consumption. There is competition in buying or consumption as well as in selling, and the consumers who compete perpetually for lower prices influence manufacturers in making a cheaper article. A retail dealer in shoes was one day asked why he did not furnish a better quality of children's shoes. "Simply because," he said, "the people do not wish to pay the cost of their making. Children's shoes are defective in manufacture to a large extent, and as a child's shoe costs more than a grown person's shoe in proportion to the material in it, parents are not willing to pay the actual cost of a well-made child's shoe. They always ask when shown a certain grade, 'Have you not something cheaper?' Then the dealer says to the manufacturer, 'Can you not furnish me something similar to this of a much cheaper grade, to supply the demand?'" And so the cheaper shoe is made.

Thus competition in buying is productive of adulterated goods in almost every line. Goods are made in these days to suit not only the volume of commerce, but also the tastes of the consumer. If we demand substantial, well-made goods, in which there is no cheat or deceit, we must be willing to pay the cost of production with a margin for

handling the goods. In other words, we must have healthy, well-fed laborers, working under a high standard of life, which means high wages and a fair price for the goods. Consumption can influence production to a considerable extent. It is not intended here to argue against cheapness of articles, for this is a blessing to the poor. The application of modern invention and machinery to the production of goods permits us to produce substantial, well-made articles at a low price and by fair wages. But the excessive cheapness of manufactured articles is to be avoided.

Sweating System.

There is what is known as the sweating system, or the method of taking articles to be manufactured in the homes or in small dingy apartments, on a contract to do so many pieces at a certain very low price. The prices paid for labor are so low under such circumstances that work must be slighted in order that people who consume these goods will have a cheap article. In the long run this cheapness is a detriment to both consumers and producers, as well as laborers. If it yielded an ample return to the consumer there might be a grain of sense in forcing the producer to grind the laborer to create the cheap article designed. But this cheapness is of no benefit to the consumer, because it gives virtually an article without service at a low price. Consumers scarcely think of this when they go to the stores to purchase, with a tendency to beat down the prices of goods to the lowest notch,—that is, demanding cheaper and cheaper made goods. To avoid this, “consumers’ leagues” are formed for the purchase of goods made by reliable houses where labor is paid full living rates, and to avoid the purchase of all sweat-made garments, which are

created under the influence of the poverty and wretchedness of low-grade labor.

Waste in Consumption.

It is a difficult thing to purchase goods properly in the market to satisfy our own immediate wants. Our wants are so many and so varied that with limited means we must weigh the possibility of satisfying first one, then the other. This is especially true among the poorer classes. They cannot always tell which they want the most, or if they can, in their purchases they frequently fail in getting what they want. To be a good purchaser in the market with modern competition is to know what one wants, and then estimate the ability to pay for it in making the purchase.

But having purchased the article, its use for consumption is even of greater importance. Take, for instance, the food that is brought into the kitchen. In the first place there is lack of economy in its preparation and in its cooking, and finally in its actual consumption. The Americans are proverbially an extravagant, wasteful people in this respect. It is said they waste enough to support another population equal to their own. This comes about not entirely through carelessness, but through lack of knowledge and training in the art of consumption. A farmer will leave his implements out in the storm the year around, and then complain of hard luck. He will leave his cattle without shelter and poorly fed, and then wonder why he loses in the business. We waste in clothing by our perpetual change in fashion, and we wear our houses out long before their time, because we refuse to

keep them in proper repair. And so for all that we use in life, there is a waste in consumption.

It is not that we desire to have a small consumption of goods, for it is highly desirable that there should be a large consumption; but it is only through economy that we are permitted to have a large consumption. If Mr. A takes care of one pair of boots he may have sufficient wealth to buy a hat or a coat, which he otherwise would not be able to purchase, or else invest his money in a better way. With economy of the flour and potatoes already purchased, people might purchase in addition apples and other things.

This principle is frequently carried into the process of consumption. Business firms seeking to enlarge their production and increase their income frequently lose because of their excess of expenditures, simply because their processes of consumption were imperfect.

Mr. Bullock, in his *Introduction to the Study of Economics*, shows that waste of foods may occur in the following ways: First, needlessly expensive foods, containing little real nutriment; second, failure to select foods best suited to the needs of the family; third, a great deal wasted which ought to be used; fourth, bad preparation of food, which causes it to lose its nutriment; fifth, the immense loss of fuel through badly constructed ovens. The author estimates that in this way at least one-fifth of all the money spent for foods is absolutely wasted. This waste of material could be carried into every department of economic life. As business becomes more exact, there is greater care in consuming all of the material. The by-products in a gas factory or in a smelter frequently

yield a large revenue. The saving of cotton seed, which formerly was wasted, adds much to the productivity of cotton-fields. The large packing-houses at Kansas City are good illustrations of the economy of consumption, for every part of the slaughtered animal is saved and turned to economic use.

References: Bullock, *Introduction to Economies*; Phillippovich, *Grundriss der Politischen Oekonomie*; Seligman, E. R. A., *Principles of Economics*; Fetter, Frank O., *Principles of Economics*.

The following report was presented to the Board of Directors of the American Society for the Advancement of Science at its annual meeting held at the University of Chicago, Illinois, on the 10th of December, 1892.

The first part of the report deals with the progress of the work of the Society during the year. It shows that the Society has been very active in its efforts to advance the cause of science, and that it has been successful in securing the cooperation of many of the leading scientists of the country.

The second part of the report deals with the financial affairs of the Society. It shows that the Society has been able to maintain its financial position, and that it has been successful in securing the necessary funds for its work.

The third part of the report deals with the work of the Society in the field of education. It shows that the Society has been very active in its efforts to advance the cause of science education, and that it has been successful in securing the cooperation of many of the leading educators of the country.

The fourth part of the report deals with the work of the Society in the field of research. It shows that the Society has been very active in its efforts to advance the cause of scientific research, and that it has been successful in securing the cooperation of many of the leading researchers of the country.

BOOK III.

EXCHANGE AND INDUSTRY.

CHAPTER I.

UTILITY AND DEMAND.

Struggle for Wealth.

The object of wealth is to satisfy wants, and the ceaseless struggle for existence is simply a want-satisfying process. We exploit mines for the sake of iron to be used in buildings and implements; for gold and silver to be made into money and ornaments; copper and lead and zinc for utility in the industrial arts; we till the soil to produce grains, fruits, and cattle for food; we exploit the forests to yield lumber for building purposes; and we use steam, water, electricity, to propel great machines for the transformation of raw materials into articles of beauty and usefulness. The more we have to work with and to live for, the more we want; our desires are never satisfied. Increased wealth—that is, an increase of economic goods—gives us increased power, and we need larger wealth and more means to satisfy this power.

Utility.

We desire these economic goods on account of their utility, and by utility we mean their want-satisfying power. Its only test is actual service. If a person wants an article, it is because it has an individual utility. If many want the same article, it has a social utility. The utility of goods is what brings them into market and disposes of them wherever they perform the greatest service, and thus

goods are distributed among the people wherever they are demanded and in proportion to the demand.

Demand Schedule.

If a single individual and a single commodity on the market are considered, it will be found that (desire for the goods diminishes as the supply increases.) While there is an endless variety of wants, there is a limit to each separate want, and it diminishes with every increase in the amount of the thing which supplies it. There is in each separate case a diminishing utility respecting every article. There is in the rational desires of every person a law of satiable desire. The total utility of an article or of a commodity on the market, which is the same as the total want-satisfying power, increases with every increment of a person's stock in it; but it does not increase as fast as the stock increases. Thus, four horses will give a greater total utility than two, but the utility is not doubled by the purchase of the two additional horses. If the purchaser continues to add to his stock, each separate horse of the same grade will be valued less than the former, until he reaches a place at which he will not pay anything for a horse, but would keep him if given to him. The last increment which he is just induced to buy is called the marginal utility. Thus, the marginal utility of a quantity of anything diminishes with every increase in the amount which he already has. (See illustration of Marginal Utility, Fig. I.)*

*NOTE.—The diagrams used in illustrating demand, marginal utility, value, etc., are suggested by the advocates of mathematical economics, such as Cournot and Jevons, and so extensively used by Marshall and adopted by Ely, Commons, Hadley, and other American economists. It is the universal method of applying mathematics to economy, and is used in this work for illustration and with no idea of demonstration.

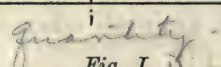


Fig. I. Diminishing Utility

Let ab , in Fig I, represent the quantity of satisfaction obtained from the first increment of food, and ac from that of clothing. Then let the diminishing scale of utility of food follow the line bm , where the actual food-supply will be represented by the line ae . At the point e , where no more food will be required for any purpose whatever, em will be called the marginal utility. Let ck be the diminishing line for the clothing scale and the actual supply represented by ah . The marginal utility in this case is gh . It is easy to see in this case that though the first increment of food is much greater than that of clothing, yet the marginal utility of clothing is greater than that of food, on account of the increased service it performs to humanity. If the line ck extends to f , and ai represents the actual supply of clothing, fi will represent the marginal utility of clothing. If this is brought about by an increased desire for clothing relative to food, the marginal utility of food will rise from me to nd ; then the marginal utility of food and clothing is the same. When two

articles are compared in this way, each individual constantly estimates the want-satisfying power of each article demanded.

Law of Demand.

Each individual thus has his demand schedule for every article. Give an intelligent child a quarter and send him to a toy store and he will spend hours looking over various articles, estimating which will give him the largest amount of satisfaction for the money which he has to spend; for demand in this case, as in all other cases, represents the

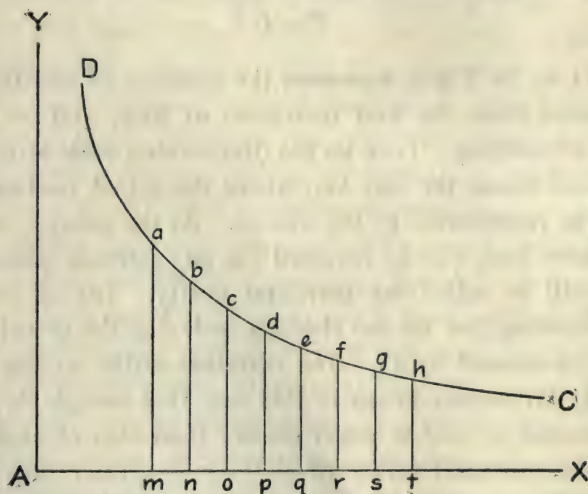


Fig. II.

ability and willingness to pay a given price for any article offered in the market, and each individual will take an amount of any given article until the demand for that article is met by a greater demand for some other article.

In Fig. II, lay off on the line AX the distances Am ,

An , Ao , Ap , Aq , Ar , As , and At , respectively representing the amounts of a given article demanded by a single person at various prices. Then erect perpendiculars ma , nb , oc , pd , qe , rf , sg , and th , representing prices corresponding respectively to the amounts demanded. Then the person will take Am goods at ma valuation, An goods at nb valuation, etc. If a curve be passed through the extremity of these lines it will be called a demand curve, which gradually approaches the line AX as the want-satisfying power of the article falls, and approaches the line AY as the want-satisfying power rises. If the value of hats falls it may not affect every one, but will affect a few people at least, and the demand for hats will increase. A fall in the value of sugar will have a tendency to induce Mr. A to purchase more, a rise in the value will cut off his demand. Every decline in valuation on the market will be met with a larger sale, but the sale is not necessarily proportionate to this fall. There is not an exact ratio between a fall in prices and an increased demand. A fall of one-tenth in price may increase the sales by only one-twentieth, or it may increase them one-fourth, or it may even double them.

The law of increased demand may be stated as follows: A decrease in the supply, the demand remaining the same, will cause the values to rise; an increase in the demand, the supply remaining constant, will cause values to rise; an increase in the demand with a corresponding increase in the supply will permit values to remain unchanged; a decrease in the demand, the supply remaining constant, will cause prices to fall; an increase in the demand and a decrease in the supply will cause prices to rise rapidly;

and in every case the demand and the supply tend to seek an equilibrium.

Market Demand.

Other things being equal, the single demand of a person is a fair representative of the whole market. What one individual is doing in satisfying his wants, thousands are doing; and very often they want the same article at the same time. It is hardly fair to say that the average demand in a given market is the sum of the individual demands, but it is true that the greater amount to be sold the smaller will be the price at which it will find purchasers; and yet the universal demand for an article by many people increases the intensity of the desire and increases its value.

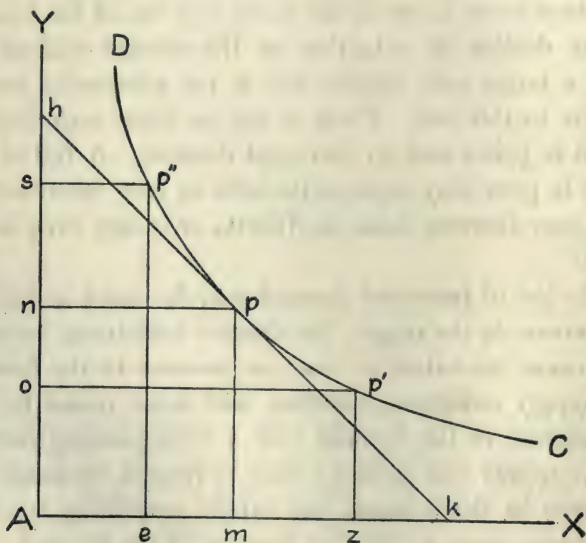


Fig. III.

To generalize Fig. II, we have Fig. III, in which we let An on the line AY represent the demand, and Am on the line AX the supply. Erect vertical lines from m and n , and where they meet the point p will represent the price or valuation, for this point will illustrate the place where exchanges take place. Suppose now that Ao represent the demand and the relative supply increased to Az and p' , the intersection of the lines erected at o and z respectively, will be lower than p . Again, suppose As represent the supply, and Ae represent the demand, and p'' will be the point where exchanges take place. Now pass a curve through p'' , p' , and p , and we have a demand curve, which represents the operation of every market in which transactions take place.

Competition and Demand.

Competition goes on in never-ceasing activity, tending to level the prices of all commodities of a similar nature. Each demand schedule is continually leveled or merged in the general market demand. There is also another competition going on in the market, between articles of a different kind. If corn becomes high, people will use wheat, and *vice versa*. Thus, competition is observed everywhere among substitute articles. When we measure men's desires and calculate the influence of each demand schedule for each separate article, we see that this method of substitution is universal, and that the appearance in the market of any commodity which can be used as a substitute for another already in use will lower the price of the latter.

CHAPTER II.

VALUE.

Definition.

Value is a relative term, which is applied to different articles to represent their degree of desirability. As it is the desire for economic goods which makes them valuable, and as utility represents the want-satisfying power of goods, value has been called the measure of utility; and in one sense this is true, for value always accompanies utility although it is never identical with it.

The various uses of the term value by economists, and the popular conception of the term, have led to great confusion. Even able writers have been often careless in its use. It is stated that at one time the celebrated Sydney Smith joined a club for the purpose of studying political economy. His sole purpose, as he stated, was to find out the use and true meaning of the word value; but after remaining in the club for some time he finally withdrew because, as he said, the club knew no more on the question than he did. Owing to the controversy on this subject, it was with a sigh of relief that some economists welcomed the work of Stanley Jevons, which discarded the use of the term altogether. In the light of recent discussion it seems very odd that John Stuart Mill should have stated in 1848 that there remained nothing for him or any other writer to state concerning the laws of value. Since that time modern economists have accepted the loose usage of

the word, giving it their own peculiar meaning. Recently, however, the Austrian economists have reopened the subject, and given a clear and satisfactory analysis of value. This discussion has given evidence of the differences of opinion on the subject.

Differences of Opinion.

Much of the difficulty in modern discussion has arisen from misinterpretations of loose statements made by Adam Smith. In his *Wealth of Nations* (Bk. I, Ch. IV) he states: "The word value, it is to be observed, has two meanings, and sometimes expresses the utility of some particular object and sometimes the power of purchasing other goods which the possession of that object conveys. The one may be called *value in use* and the other *value in exchange*. The things which have the greatest value in use have frequently little or no value in exchange; on the contrary, those which have the greatest value in exchange have little or no value in use. Nothing is more useful than water; it will purchase scarcely anything, scarce anything can be had in exchange for it. A diamond, on the contrary, has scarce any value in use, but a very great quantity of goods may frequently be had in exchange for it." While it was evidently not intended by the author to divide all values into two great independent comprehensive classes, he intended to point out two separate uses of the term. Perhaps his greatest error is found in his misconception of the term utility. In an economic sense a diamond is very useful, because men desire it and use it, although water may be more beneficial. Whisky and beer are use-

ful, although they may not be beneficial. Economic value rests upon the use of articles, and the use depends upon their desirability.

Free Goods and Economic Goods.

A discrimination should be made between economic goods and what are termed free goods. Air and light are useful and beneficial, but they are provided in such great quantities and without any effort on the part of man that they are said to have no value. Water is sometimes classified in the same category, but its scarcity and its enlarged use in supplying cities and in irrigation have developed in it an economic quality. The only goods that we economize or about which we have economic care are those which are just sufficient to supply our wants or insufficient for that purpose; consequently, the free gifts of nature, which are bestowed in such abundance as to be in no sense objects of care to man, are said to be valueless. Hence it is, if no want is created there is naught to be satisfied, and consequently there is no utility, and if there is no utility there can consequently be no value.

Value an Index of Utility.

If utility is the want-satisfying power of goods, value is a sort of index, expressive of the variations of utility. It is the valuometer which measures the intensity of desire. Hence it is that value changes with utility, increment by increment, and this value indicates the rise and fall of utility. However, the sum total of utility is not equivalent to the sum total of value, any more than the sum total of the readings of a thermometer during the day will measure the sum total of the heat in a given mass of water

during the same period. Both utility and value are relative terms, and the changes in utility are recorded by the changes in value; nevertheless, the utility of the mass of a given good may increase while the value of the mass may decline.

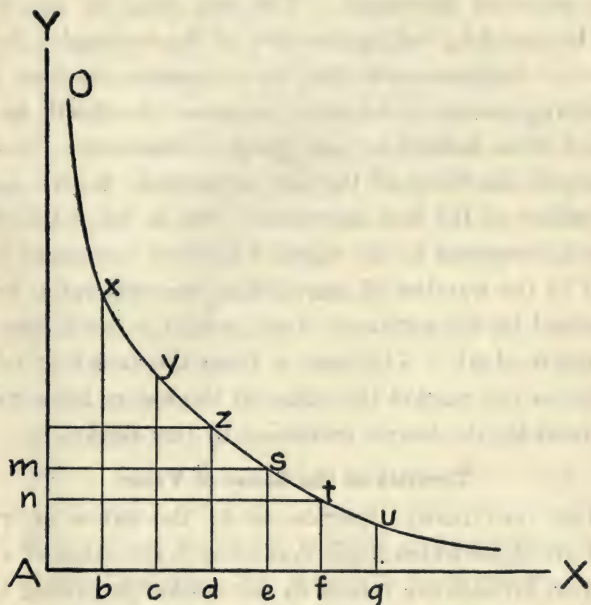


Fig. IV.

Let us illustrate these principles by Fig. IV. Let the base AX represent the quantity of wheat to be had for all purposes. Let the vertical line AY be the want-satisfying power of this mass. Let Ab represent the first increment, used for sowing wheat, bc for making bread, cd for feeding horses, de feeding cattle, etc., (each increment supposed to represent the want-satisfying power.) Let

bx represent the want-satisfying power of the first increment, cy of the second, dz of the third, etc. If we extend a curve through the extremities of these lines we shall have a curve of valuation as well as an utility curve, the value of each separate increment varying as the utility of each separate increment. The sum total of the utility will be found by taking the sum of the rectangles Ax , by , cz , etc. Suppose now that es represents the last want-satisfying power of wheat. No more wheat will be purchased or be desired for any purpose whatever. This will represent the value of the last increment; it will also be the utility of the last increment: but as the value of the mass is measured by the value of the last increment multiplied by the number of increments, the total value will be measured by the rectangle $Aesm$, which is much less than the figure $AesY$. This occurs from the fact that of any article in the market the value of the entire mass will be governed by the lowest valuation in the market.

Theories of the Cause of Value.

There are many theories as to the cause of value. First are those which teach that labor is the cause of value, and that articles are valued in the market according to the labor it has taken to produce them. This theory was first propounded by Ricardo, and subsequently defended by Bastiat and Karl Marx. It is true that labor has much to do with the increase or decrease in the value of goods, but it cannot be taken as the primary origin of value. If this were true, that the value of an object is determined by the labor spent in its production, then it would follow that value would be unchangeable; on the contrary, we see

that the values of articles constantly change. Machines and implements that cost excessive and long-continued labor are finally rendered valueless because they are no longer desired for service. The same idea is expressed in the exchange of articles in the market at the same price, which cost different amounts of labor. If labor were the cause of value, articles that cost the same amount of labor would exchange equally; and again, if labor were the cause of value, there would be no value without labor,—yet things which are of great value are found or discovered without any particular labor. But labor itself is valuable, and we could not estimate it if it were the sole cause of value in other things. It is evident that this theory, formerly accepted, is untenable.

Another theory is called “the difficulty-of-attainment theory.” But it presents a condition of value, and not a cause. It hinders us from placing desirable goods upon the market, and thus makes a scarcity in the market and the value of the articles rises; that is, the demand remaining the same, the supply becomes deficient and values rise. But suppose no person wanted these goods, however difficult of attainment, they would be of no value.

Closely allied to this is the scarcity theory. It simply asserts that because these goods which are furnished us gratuitously and in abundance without labor have no value, other goods are valuable because they are scarce. It is true that if desirable goods become scarce their value will be enhanced, but scarcity may not be called the primary cause of value. Frequently there are goods in the market, very scarce, but no one wants them and they have no value.

Utility the Cause of Value.

The last group of theories to be mentioned is that of those who say that utility is the cause of value. Taking utility in the sense of satisfying wants, this is a correct theory, for it is the want-satisfying power of goods which makes them valuable. This want-satisfying power and the demand remaining constant, goods will increase or decrease in value in accordance with their difficulty of attainment, just as they are scarce or plentiful in the market. As we desire goods very keenly their value rises, and our desire is greatly increased if we find them insufficient for our wants; their quantity, moreover, is more or less insufficient in accordance with the ease or difficulty with which they are multiplied.

Objective and Subjective Value.

It is convenient to classify value into objective and subjective, for a better understanding of its nature. When we consider personal well-being, value is considered to be subjective; but when we consider some technical or mechanical result without any immediate reference to personal well-being, then we have objective value. The latter may again be divided into two divisions,—the first represented by the amount of potential energy in material goods, and the second in the power of exchange. These represent the relation of potential energy and relative capacity between different articles. To illustrate, let us take the subject of coal. The subjective value of coal is determined by the amount of satisfaction I get in warming myself before the fire. The objective value of coal will be the amount of power it creates through its

heating capacity; and in the other objective sense, the amount of economic goods it will exchange for in the market. In economics we have nothing to do with the first two divisions of objective value. We may not consider the heating capacity of coal, the resisting power of different kinds of wood, the feeding power of corn, nor the life-giving power of sunshine; we have to do with but one objective phase of value, and that is exchange value. The power—or capacity, if we may say this—of objects in exchange, is economic value.

It will be observed, however, that this phase of objective value rests upon personal or subjective value. In other words, exchange value rests upon men's desire for goods and their personal estimates of what goods are worth in the market. Thus will value, which represents power or capacity in exchange, rest upon man's attempt to satisfy wants. Wherever there is a want to satisfy, there value arises. If a surplus occurs so that want is impossible, or if desire ceases on account of satiety, value declines and tends to pass out of existence. But wherever a want exists,—a lack of something,—there is an accompanying desire to find the thing needful. Therefore, both utility and value rest upon the basis of the wants of man. The degree to which wants are felt depends upon the extent of the supply needed before the point of satiety is reached, and also upon the common supply in relation to the need; consequently we must come to measure all wants relatively by the laws of supply and demand. By the demand for an object is meant the desire for it, accompanied by the willingness and ability to pay for it in goods, services, or money.

Intrinsic Value.

The tendency in people to insist that the physical qualities of an object determine its value, turns the whole matter into objective relations, as there is a tendency to believe that objects carry with them some inherent quality that makes them valuable. So far as they satisfy the wants of man this is true, for it is the quality of goods that makes them desirable, and by quality we mean their capacity for service or pleasure, and this makes them desirable and hence valuable. The so-called intrinsic value of an article means nothing more than its capacity to satisfy desires. The intrinsic value of a hat is simply hat-service or hat-satisfaction; intrinsic value of money is its exchange value; intrinsic value of a gold watch is its service and beauty. The term is more frequently used in respect to money than in any other way. Thus, gold and silver are said to have intrinsic value. For the purpose of exchange, the desire for a gold dollar is just the same as the desire for a paper dollar, for the two will perform the same service,—no more, no less. Hence it is that the intrinsic value of an article must rest upon desire alone, and that simply means that it is subjective.

Now the real point at issue is that gold can be used for some other purpose than that of mere exchange. Its market is large and its demand is constant for a thousand purposes, while the paper dollar can be used for only one purpose, or possibly two, because the paper might be used in the manufacture of other paper; hence the intrinsic value of paper money is nothing, or very small, while the intrinsic value of gold, being universally desirable, is very large. We reach the conclusion, then, that

all values in the ultimate must be traced to the subjective conditions. Primarily, gold, silver, lead, copper, iron, tin, will be valued according to their service and satisfaction, and of course their service and satisfaction will depend, secondarily, upon the qualities which they possess.

References: Smart, William, Introduction to the Theory of Value; Marshall, Principles of Economics; Commons, Distribution; Ely, Outlines of Economics; Wieser, Fred von, Natural Value; Seligman, Principles of Economics.

CHAPTER III.

PRICE.

Definition.

Price is the value of an article measured in the terms of money. As all commodities are measured in terms of one called money, a general rise in prices is indicated by a general fall in the value of the measuring unit. As all values are relative, there could not be a general rise or general fall of values, for if articles *a*, *b*, and *c* have their values represented by 10, 20, and 30, it means that their ratios of value are 1, 2, and 3. If now the value of each is doubled they will become 20, 40, and 60, or if it is reduced to 50 per cent, they will be 5, 10, and 15. In each case the ratio of 1, 2, and 3 remains. There may be a rise or fall in the price of one or more articles in relation to other articles without any necessary change in the money value, but when all prices go up or down it is an indication that the values of the articles of the group have changed their relation to the measuring unit called money.

Manner in which Market Price is Established.

We have already noted, in Chapters I and II, the nature of subjective value and the individual-demand schedule. The marginal demand and the marginal utility are now understood, and the relation of marginal utility to value and price have been theoretically explained. It now remains to be determined how, from a practical standpoint,

prices are established. Remembering that the law of supply and demand indicates an equilibrium, and that in individual cases the demand decreases with the lowering of the marginal utility, let us enter an ideal market, and by illustrations see what actually takes place between individuals.

Suppose A wishes to sell a horse, the only one of its kind in the market, and B is the only purchaser. Suppose A's minimum price is \$30 and B's maximum is \$25. If the two parties hold to this there will be no sale; A would be willing to take \$30 for the horse, but no less; B would be willing to pay \$25 for the horse, but no more. There are other ways in which he would rather invest his money rather than pay a dollar more than \$25; A knows no other way more to successfully invest his money than at the price, \$30.

Second proposition: Suppose A's minimum price is \$30 and B's maximum price is \$40. That is, rather than not get the horse, B would pay \$40; rather than not sell, A would take \$30. At first each man's proposition is unknown to the other. A desires to get all he can for the horse; B wishes to purchase it at the smallest price possible. There will be a sale, the price being fixed between \$30 and \$40, according to the skill of buyer or seller. This is a simple illustration of what is known as "the haggling of the market." As a third case, suppose A's minimum price is \$30 and B's maximum price is \$30; there will probably be a sale at that figure. It may happen that such a case actually occurs.

Again, suppose there are three purchasers of horses,

willing to give \$30, \$35, and \$40, respectively, for the horse, and there is only one horse of the kind in the market. Then A, B and C bid for the horse. It is a case of competition in buying, but not a competition in selling. A ceases to bid above \$30, B ceases to bid above \$35, and the difference is settled between C and the seller. If C is a shrewd buyer he will not pay much over \$35, because he has discerned that the seller would be willing to take \$30 rather than not sell.

Suppose now there are three horses in the market and three purchasers, and that A will sell at \$30 minimum, B at \$35 minimum, C at \$40 minimum. D will pay \$35 maximum, E \$35 maximum, and F \$40. Now if the three horses are similar and are sold in the open market, a fair price will be fixed for the horses. F does not propose to pay more than E or D. And D expects to pay as much as either E or F. The sale takes place. The price of the horses will be fixed between \$30 and \$40, and as D and E offer each \$35, and there is one horse offered at this price and one at less, the majority of buyers and sellers would indicate a price at \$35 whether the horse is sold or not.

This is an elementary case of buyers and sellers. If we enlarge this market, and have many buyers and many sellers, we shall have universal competition in buying and selling in the open market; and it is by this method that prices are finally fixed. Where a series of buyers and a series of sellers are competing, exchanges will take place where each individual sees a gain. Every individual will prefer a greater gain to a less, and the price is established somewhere between the minimum of the seller's subjective

valuation and the buyer's maximum valuation, or between the subjective valuation of the first of the successful and the first unsuccessful buyers where only competition takes place; or, in competition of many buyers and sellers, between the subjective valuations of the last buyer and the last seller. In this manner a market price is established for all bidders.

Market Interferences.

In any market the supply of a given article is the amount offered at a given price; and it is different from the stock of the article on hand. This discrimination must be kept carefully in mind. The supply of an article always decreases with a decrease in price and increases with an increase in price. Now a market is a place where prices are determined by competition, and the market demand for an article is the amount that will be taken at any given price. It diminishes as the price increases. It is different from mere desire. It represents the willingness and ability to take a certain quantity of a given article at a given price. A monopoly destroys the market, and principles laid down for the establishment of a market price can prevail only under free competition. Under our modern system of competitive trading, the price at which the demand is equal to the supply will be the market price of the article.

Take, for instance, the example of cotton. Suppose it be selling at eight cents in the New York market. So long as the demand equals the supply, the price will remain at eight cents. If a large stock is thrown upon the market the sellers will begin to fear that they cannot dispose of their stock, and will offer to sell for less. The buyers,

observing this, each strives to obtain it at a lower price, and so two groups of people strive to fix on the market rate,—the bulls and the bears. In the Berlin Stock Exchange the equalizing of the supply and demand and the fixing of a market rate is left to a commission. The committee settles upon the price which will secure the maximum number of transactions. In an ordinary market this settled price is fixed by the self-interest of groups of

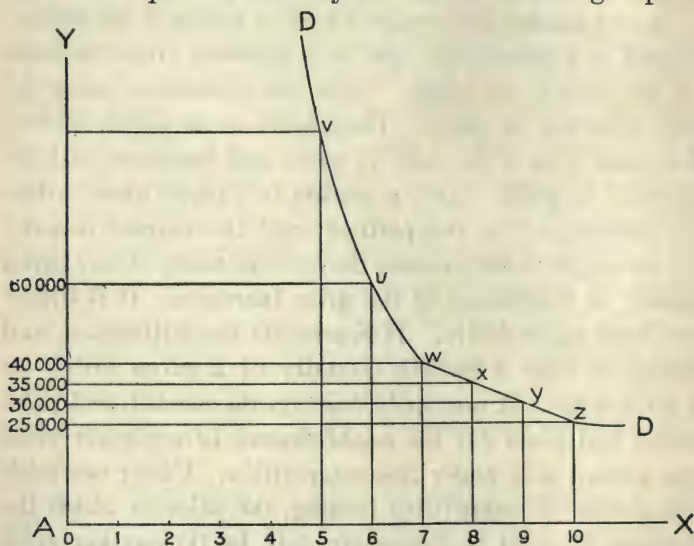


Figure V.

buyers and sellers acting under free competition and independently. There are interferences in the establishment of this market through corners of market valuations, and through custom by which prices are sometimes fixed for a long period of time, and finally through combinations of buyers and sellers in fixing the price.

Referring again to the market of copper for a single day in New York city, let us suppose in Figure V that on the line AX we have 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, as representing prices of copper demanded in quantities ranging from 10z, 9y, 8x, 7w, 6u, 5v, etc. Now since the quantity tends to increase as the price decreases and diminish as the price increases, if 10x equals 25,000 pounds we shall find there will be demanded that amount at 10 cents, 30,000 at nine cents, 35,000 at eight cents, 40,000 at seven cents, and 60,000 at six cents.

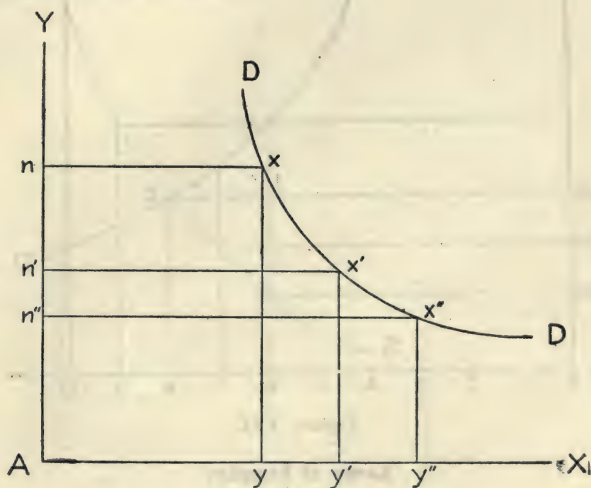


Figure VI.

Generalizing this as in Figure VI, at a price Ay' there will be demanded $y'x'$, and at the price Ay there will be demanded yx pounds, and the price Ay'' there will be demanded $y''x''$ pounds. If a curve DD be passed through x , x' , and x'' , we shall have represented the demand curve, illustrating the rise and fall of prices and the amount of

goods demanded at the different prices. Probably the whole stock in the market will be offered at ten cents if there are not sufficient purchasers. At nine cents a little will be withheld from the market, more at eight cents, still more at six. If 90,000 pounds be the stock, only a part will be thrown upon the market in a single day.

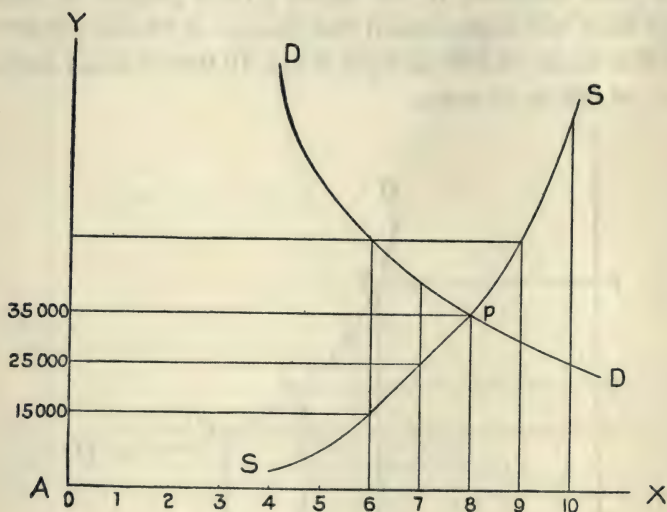


Figure VII.

Laws of Supply.

Now suppose in Fig. VII we let 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, on the line AX represent the respective prices at which copper is offered in the market. Suppose there are 15,000 pounds offered at six cents, 25,000 at seven cents, and 35,000 at eight. Then we shall find that as the price increases from six to seven the amount offered will increase from 15,000 to 25,000 pounds, and as the price increases

to eight the amount offered will be 35,000 pounds; but if the amount demanded at eight cents is 35,000, the demand curve will also pass through the point p . At this point the market value will be fixed and 35,000 will be offered at eight cents and the remainder will be held for a rise in price; that is, the point of intersection of the demand curve and the supply curve will be the point of

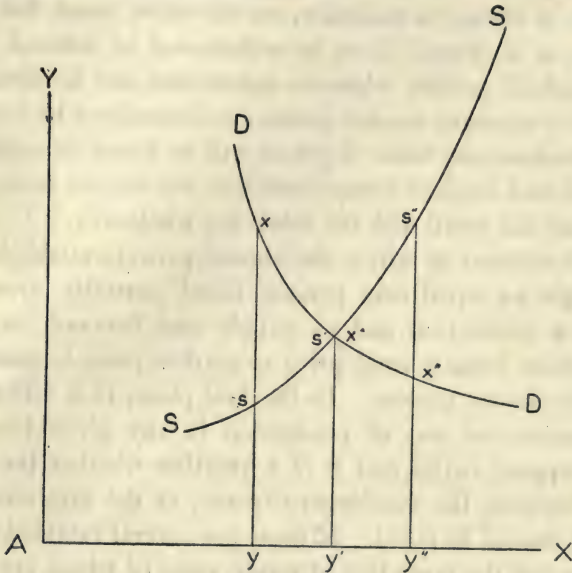


Figure VIII.

the market price. In the case of perishable goods the supply curve will be represented by a straight line, as the whole amount must be offered in a given time, regardless of price. Generalizing, we have the law illustrated in Fig. VIII, the point of intersection of the supply curve SS with the demand curve DD at $x's'$ represents the point of market price and Ay' will represent the market price.

Normal Price.

The normal price of articles tends to approximate the cost of production. Through competition, prices of staple commodities are proportionate to the cost of producing them. If the market price of an article is not sufficient to pay the cost of making, attention will be turned to other products, such as copper, lead, gold, silver, wheat, corn, etc. There is always a tendency, on the other hand, for high prices to be forced down by withdrawal of demand from high-priced articles wherever substitutes can be obtained. While temporary market prices are determined by traders, the fundamental basis of prices will be found in manufacturers, and we shall always find then two market centers,—the one the retail and the other the wholesale.

The manner in which the normal price is established is through an equalizing process based partially upon the cost of production and on supply and demand, and the transition from normal price to market price is generally a very clumsy process. In the first place, it is difficult to determine the cost of production in any given line, for the expense varies and it is a question whether the average expense, the maximum expense, or the minimum expense should be noted. If there are several establishments producing the same line of goods, some of which are more favorably located than others, those more favorably located will be able to produce goods at a cheaper rate, and when the demand is limited, so that the more favorably located institutions produce all the goods necessary, these richer establishments will set the normal price; but when these more favorably located establishments are not able to furnish the entire output, the price will be set by the least

favorably located in the entire number. Perhaps the average expense will be estimated by taking, year in and year out, the entire product and averaging the price throughout the given period.

At best, the relations between cost and price are obscure, on account of by-products. Thus, in the production of cotton we have cotton seed, which goes a long way toward the cost of production of the cotton; and in some

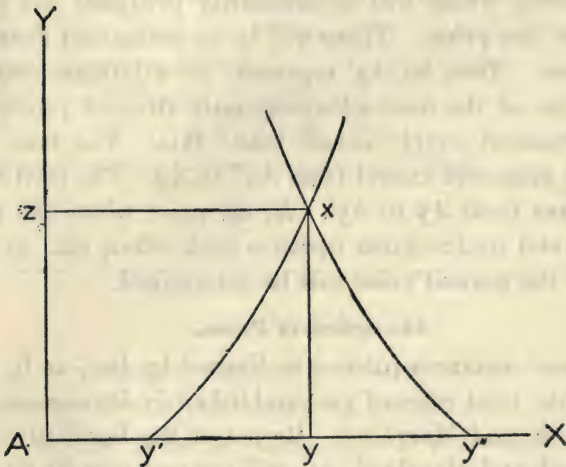


Figure IX.

instances coke, which is obtained in the manufacture of gas, receives such a favorable market as to greatly reduce the cost of the gas. There is a steadiness, however, to all manufacturing industries, hence there is a slowness of investment. It is not easy to shift investment of property from one place to another, hence the process of change of investment is very slow. Manufacturing industries may enjoy a monopoly for many years before competitors

discover the real marginal profits. Railroads may enjoy monopolies for years though threatened with competition. Nevertheless, with all interferences, there is a tendency in all prices to become normal in spite of legislation or combination, and where we have normal prices the amounts of production and consumption tend to equalize each other.

In Fig. IX,* let Ay on AX be the normal price, and yx the quantity which will be ordinarily produced and consumed at that price. There will be no permanent demand above this. Then let Ay' represent the minimum cost of production of the most advantageously situated producer. All permanent supply ceases below this. The total demand or price will extend from Ay'' to Ay . The total supply or cost from Ay to Ay' . At the point where the production and consumption equalize each other, viz., at the point y , the normal price will be determined.

Limitation of Prices.

In some instances prices are limited by law, as in the case of the legal rates of gas established in Massachusetts, New York, and Maryland. By act of the legislatures of New York and Maryland, gas will not cost over \$1.25 per thousand cubic feet. Monopoly cannot extend beyond this price. In former times it was an object of great controversy to determine what was a just price or a fair price. Many attempts have been made to limit prices by law, most of which have failed. The attempts to establish maximum freight rates have proved to a certain extent failures where they have tried to make these rates fixed. Where they have been placed in the hands of commissions, with

* See Hadley, p. 90.

the mandate of the law insisting only on reasonable rates being charged, something has been accomplished to regulate these rates. In many instances medical fees are limited by custom.

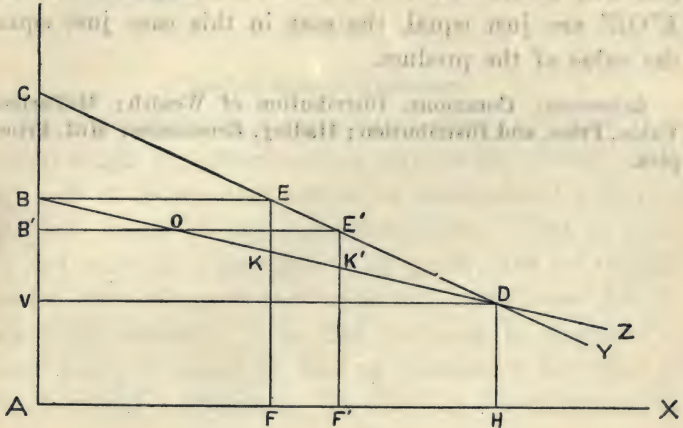


Figure X.

Cost of Production, and Normal Price.

In Fig. X,* let AX equal the production of an indefinite quantity of some commodity of increasing returns, then BZ a line of diminishing cost per unit of the product. Let AC represent the greatest utility of the product, and CY the line of diminishing utility. Now if the product should exceed AH , the value of the marginal product will be less than the cost of producing the same. That is, the value of the product will be $AVDH$, while the cost will be $ABDH$, and the cost will be greater than the value of the product by the triangle BVD . Now let us limit the pro-

* See Commons, p. 125.

duction to the point F , then the value of the product will be $AFEB$, and the cost will be $AFKB$. The profit will be BKE . Again, if the limit of the point of production be at F' , then the value of the product will be $AF'E'B'$, and the cost will be $AF'K'B'$. As the two triangles BOB' and $K'OE'$ are just equal, the cost in this case just equals the value of the product.

References: Commons, *Distribution of Wealth*; McFarlane, *Value, Price, and Distribution*; Hadley, *Economics*; Mill, *Principles*.

CHAPTER IV.

MONEY.

Beginnings of Exchange.

When the division of labor came about, and each individual sought to perform certain services for himself which he could do better than others, he accumulated a surplus of goods which he exchanged for others. That is, when he had more of a certain line of goods than he actually needed, he exchanged the "relatively superfluous for the relatively necessary." In this exchange he disposed of those goods of which he had an abundance for those of which he had a deficiency. In this way barter sprang up.

Early History of Money.

Money was not devised by the thoughtfulness of any one brain, but came into being simply by use. The practices of nations in primitive times, as well as in present times, reveal more clearly to us the nature of money; and the presentation of facts concerning these tends to show us how far our theories are correct and to be depended upon.

Money came into use through the economic process of exchange. At first, one man produced all that he used, and exchanged nothing with his neighbor; there was, of course, no need of money. But as time passed on and he traded his surplus products for those surplus products of others, he entered into the field of barter. But, as exchange extended and grew more complex, there came to be a certain

commodity which measured the value of all other commodities, and this we call money. This development of exchange led to the use of different kinds of money. First, it might have been ornaments used as money. Finally, the metals were used; first the low-grade metals and then the high-grade metals.

The development of exchange led to the use of more and more valuable metals, and more and more valuable things to exchange. The accumulation of wealth led to the use of a higher and more valuable medium of exchange, the standard of measuring value.

Thus it is that money in its different characters and capacities is, in one sense, an index of civilization. In a low grade of civilization, where the standard of living is low, where the accumulation of wealth is not great, we find a medium of exchange of very little value. Consequently the lower and baser metals, such as iron and copper, or such ornaments as shells and beads, could be used as money among savage tribes. Iron, copper, bronze, tin, and silver, each one in its turn, has been the chief medium of exchange of tribes and nations. But prior to the use of money, barter represents the earliest form of exchange.

Barter is the exchange of commodity for commodity. Exchange itself has been called by Mr. Jevons, "the barter of the comparatively superfluous for the comparatively necessary"; meaning, of course, that one man will trade those things in his possession which he least desires for those things in the possession of others which he desires more, and which the others desire less. Consequently both parties are benefitted by the barter.

Barter may take on several different forms: as, the exchange of commodity for commodities—the trade of potatoes for sugar; second, the exchange of commodities for services—a day's labor for a sack of flour; third, the exchange of services for services—you work for me while I harvest my crop, and I'll work for you while you harvest yours. Such are the formulas for barter. To a certain extent we find remnants of these ancient forms, and they tell us of the day when there were no other methods of exchange than these.

There are indeed many difficulties and inconveniences in barter, and the chief difficulty of it is that there must be valuation of the bartered article in terms of every other article in the market. So that for the exchange of 100 articles there may be 4,590 separate measures of value. Thus, the hat must be measured in terms of the coat, and the coat in terms of potatoes and corn and flour, and so on. Another instance of the difficulty of barter is the indivisibility of articles. A tailor has a coat which he has made, with which he desires to buy groceries and hardware; doubtless he gets the articles which he needs from several different persons, but the coat cannot be well divided; consequently he cannot trade with several different persons until he can find some opportunity for exchange.

So, also, of the payment for services: the person who works a day or a week or a month must be able to obtain in pay the articles which he desires, but as soon as he gets them he must look around for some one to take them in exchange for those goods which he wishes. And again, it is a cumbersome method of exchange; a process which

would apply to a slowly moving community, a slowly developing civilization; a people in whom is found no progress; and that is one reason why the kind or class of coin used represents the rapidity of progress of a nation.

I have stated that the complexity of trade leads to the primitive use of money. Thus, primitive money was generally some well-known commodity, something that was universally produced and universally admired within the limits of the tribe or tribes among which it circulated. Worthless things are not usually chosen as money. In the natural history of its development, doubtless in very early times, things that we might call worthless, such as the articles of personal adornment, were used as money; but they satisfied human desire, and that is what makes things valuable. Value rests not on the thing itself, but in its capacity to satisfy human wants. Value is more subjective than objective. Thus in the hunter-fisher stage we find peltry and other productions of the chase were used as money. In this rude state of civilization the products of the chase would be the natural measures of value, on account of their permanent value caused by their universal desirability as clothing. Hence the skins of animals became one of the earliest forms of currency. Not only the Oriental nations, but the northern nations of Europe, as well as the American Indians, have used the skins and furs of animals as rude currency. In this respect the early history of the Hudson Bay Company with the North-American Indians is exceedingly interesting. The different furs or skins of animals were represented at different prices, and they bought flour with the beaver-skin and the marten-skin. One beaver-skin was supposed to be worth two shil-

lings and it represented two martens, and so on; and these skins were exchanged for clothing and food according to their real value.

If we advance one step higher in civilization and come to the currency of the pastoral age, we shall find that sheep and cattle formed the chief money of the peoples. Even among the ancient Greeks we find the payment in oxen rather than in coin.

Our word "fee" has an interesting history: it comes from the Anglo-Saxon "feoh," which means both money and cattle, or a kind of treasure, so that the cattle were in this period the medium of exchange. Likewise, slaves were used in the same period, exchanged for goods, and bought and sold as a measure of value. In both of these periods we find the articles of adornment being used for money; shells and beads and trinkets which were considered valuable and which were universally known were among the media of exchange. There was a particular sort of beads made of the ends of black and white shells rubbed down and polished, and these were called wampum. This was so well established as currency among the Indians that the court of Massachusetts ordered in 1649 that it would be received in payments of debts among the settlers to the amount of forty shillings. Rich Indian chiefs hoarded the wampum even as miners hoard gold and silver.

In the agricultural stage we find a great change; corn became, in the European states, a measure of value, and in Norway it is related that it was even deposited in banks and loaned and borrowed. It is a great advantage over articles, in that it is easily divisible even to a grain. It is

known that grains in Central America were formerly circulated as money. So, too, in America, in the colonies, tobacco, beans, tar, wheat and other articles were not only used in circulation but made legal tender by law for the payment of all debts and obligations. In 1618 the Governor of Virginia ordered that tobacco be received at the rate of three shillings for a pound-weight, and the penalty for refusing so to receive it was three years' hard labor; thus it was made legal tender. And we are told that when the Virginia Company imported young women as wives for the settlers the price per head was 100 pounds of tobacco, which was subsequently raised to 150 pounds on account of the scarcity or superior quality of the goods.

As late as 1732 the Legislature of Maryland made tobacco and Indian corn legal tenders. And so we find that land was bought with tobacco; groceries and provisions were bought for tobacco; subscriptions to colleges were made with tobacco; and the foundations of lotteries made on the basis of tobacco. So South Carolina, in 1687, made corn, peas, pork, beef, tobacco, and tar, legal tender. In an early day in Oregon, wheat was made a legal tender for the payment of taxes and debts. Cows were made legal tender for taxes in Massachusetts colony, and the poorest cow was always given for taxes.

The use of metals, particularly gold and silver, represented a great step in the advance of commerce. We find, too, that the lower and baser metals were used first as the principal means of coinage, but were generally replaced by gold and silver as the chief measures of value. It is difficult to determine just when the use of gold and silver began; without doubt they were first used as ornaments

on account of their brilliancy, and perhaps their supposed value. They were long desirable before they were used as money. Indeed, in their earlier period they were doubtless too scarce and too much prized to be used in common circulation.

Although bronze and tin had been used to a considerable extent, copper became the first metal to be used universally, and this was gradually replaced by silver and also by gold. Iron itself was used in very early days in the form of small spikes, which were exchanged somewhat similar to the bars of iron which are now used in trading with the Indians of Central America. And not long ago, iron money was in use in Japan for small values.

Lead, too, has often been used as currency,—it is mentioned by the Greek and Latin poets; and once, in 1636, bullets were used as an exchange in Massachusetts. Lead is now currency in Burmah, being passed by weight for small payments.

Tin also was used at an early date. It was produced from Cornwall. Doubtless, the first coin of Britain was composed of tin. England frequently coined tin; in 1680 tin farthings were struck by Charles II., a stud of copper being inserted in the middle to render counterfeiting more difficult.

The earliest Hebrew coins were composed chiefly of copper, and the metallic money of Rome consisted of copper, down to the year 281; then silver was first coined. The great fault in copper, its low value, now renders it unfit for use as a coin. It would take so much to make a coin of small value that its use would be cumbersome. However, in China and in other Oriental nations we find

small blocks of copper now in circulation. In a country where there is such infinitesimal division in exchange, doubtless it might be used to-day. For subsidiary coinage, bronze has succeeded copper with nations of the world.

Since the first introduction of the art of coinage, silver has been coined and highly prized for its fine, pure white luster, its peculiar qualities making it desirable for money; and the valuation put upon it for use in the arts has rendered silver one of the most suitable and valuable metals for the measurement of values. Its value has remained more stable for long periods of time than any other metal. And one reason, as we shall learn, is the steady, even production of silver, and the great stock of it used in plate and ornaments.

But gold has been recognized as the king of metals because of its great desirability due to its peculiar qualities, of great hardness, malleability, and absolute purity. And these, more than anything else, have tended to render gold sought for by all nations of all times; and this desire, coupled with legislation, has made gold exceedingly valuable, so that it has always ranged more valuable than silver from the earliest times. Other metals have been used as money, such as platinum, coined in 1825 and 1845 in Russia, and afterwards abandoned because it was unfit for currency, being too difficult to coin and too scarce. Nickel also has been used to a considerable extent. There is a tendency in the use of all metals to use the highest grades for the measure of value for large transactions, and to use the cheaper metals for subsidiary coin and for small transactions.

Kinds of Money.

It is convenient to divide money into various kinds according to its services. Mr. Ely has divided it into Popular money, Legal money, Economic money. Popular money is that which is accepted by the people regardless of economic or legal conditions. Popular money is best exemplified in the definition of Mr. Walker:

“That which freely passes from hand to hand throughout the community in final discharge of debts and in full payments of commodities; being accepted equally without reference to the character or credit of the person who offers it, and without the intention of the person who receives it to consume it or enjoy it or apply it to any other use than in turn to tender it to others in discharge of debts, or in payment of commodities.”

Any article which will perform these services may be called money, whether it be made of paper, gold, silver, or lead.

Legal money is that which is used by law, and has reference to legal-tender goods with reference to money. Anything that is established by law as money is a legal-tender good. Legal-tender money is not always popular; thus, the Treasury note or “Greenback” has been unpopular at times. In the time of the war, in California, people refused to accept them, and the result was that they did not circulate. Frequently coins become unpopular and the Government is obliged to recoin them. Again, on the contrary, the National Bank note is not legal tender, and yet is among the most popular forms of money we have at present.

Economic money fulfills the following conditions: It must serve as a measure of value and a medium of exchange. In order to be a medium of exchange it must be

popular, and to a certain extent be legal tender. It must be the means of making deferred payments, and also it must be a storage of value. In most instances money must be also legal tender; but the best money will include all of these functions. It must be popular, being readily received; it should be legal tender, to answer all requirements in the law; finally, it ought to be economic in fulfilling the above conditions.

Functions of Money.

The principal functions of money are those enumerated above: to be a medium of exchange, measure of value, means of deferred payments, and storage of value. Money as a medium of exchange is the most popular conception. In this, money becomes an instrument by which exchanges are brought about. It comes from the expression of value of two articles in the market in terms of one article which is, in primitive society at least, the one most commonly recognized. Whatever money is most convenient for this, other things being equal, is the best money.

Measures of Value.

Money measures value because it has value, and only the substances which have value can be used as money. Length measures length, weight measures weight, and value measures value. All measures are merely comparisons. Comparing one article with another, we get a measure. When we say a table is two yards long, we express a comparison. The length of the table is to the length of a known measure, called a yard, as two is to one. When we say an article weighs four pounds, we say the weight of the article is to the weight of a known article, called a

pound, as four is to one. When we say the value of an article is four dollars, we simply imply that the value of the article is to the value of a known unit, called a dollar, as four to one. All money in exchange is a measure of value. It matters not what the money is, the exchange implies a comparison and a measure; and whether it be paper or gold, if it performs its money function, it is entitled to the term money.

Standard of Value.

We should distinguish the standard of value from the measure of value. While all money might be a measure of value, not all money is a standard of value. Back of all moneys is one to which all are referred as a standard. To understand this, we should observe what kind of standard of measurement we have in regard to length. There are a large number of yardsticks in every community. Every one is a measure of length; but some may be longer or shorter than others, still they are measures of length. There is, however, a government standard of length, to which all other yardsticks are referred. This yardstick is the standard of length, based upon the vibrations of a pendulum. The same way with regard to a measure of weight. There may be several scales in the community, each measuring weight, although they may vary. There is one standard to which all may be referred for adjustment. This is the standard of weight of the government, which must be absolutely correct. So, whether we have bank notes, silver certificates, gold certificates, or silver money, they are all referred to gold as a standard of value.

Deferred Payments.

In modern life many occasions arise for contracts extending over periods of time of greater or less duration. When exchanges take place on the market, usually there is no consideration of time; in time contracts, however, this is a very important consideration. It is evident that did money fluctuate in quantity or in value as much as do many commodities on the market, there would be a great element of risk introduced into these time contracts, often causing heavy financial loss to one or the other of the parties concerned. Great demoralization of trade would be the result. Trade would not increase as freely and as rapidly as it would otherwise, and possibly there would be even a shrinkage in times of more than usual fluctuation of the measuring unit. Hence it is that money, which by its nature and use becomes the standard of deferred payments, must be of as stable a character as possible. The precious metals, gold and silver, have been found to vary much less than probably any other known commodity, and on that account are peculiarly suited for use as money. Even here, however, some fluctuation occurs. To obviate the harm arising from these variations, different standards have been devised, but none of them have ever received more than a tentative application.

Multiple Standard.

One of the suggested means for avoiding any change in the standard of value is what is known as the Multiple Standard. The term refers to a standard composed of or based on a number of articles instead of one. Thus, a gold standard is based on simply the one article, gold. A bimetallic standard is a multiple standard, for with it

two metals are used upon which to base the money standard. What is known as a tabular standard is simply a variation of the principle of the multiple standard. According to the exemplification of this method as given by Dr. Jevons, the present monetary systems would be retained under the tabular standard, but they would cease to be standards for deferred payments. Instead, a number of staple commodities would be continually compared in their relations with the monetary standard, and all settlements would be made in money, but on the basis of the tabular standard. That is, to quote Mr. Jevons: "Suppose that a debt of \$100 was incurred upon the 1st of July, 1875, and was to be paid back on 1st July, 1878; if . . . the value of gold had fallen in the relation of 106 to 100 in the intervening years, then the creditor would claim an increase of 6 per cent. in the nominal amount of the debt, and *vice versa*."

Storage of Value.

Another of the functions of money already mentioned is that of storage of value. The necessity for this qualification in good money arises from the fact that were an article good to-day and not good to-morrow it would be received in trade with considerable hesitation; no one would be willing to receive it unless he expected to be able to dispose of it before it lost its value. Such a lack of stability and permanence of value would be fatal to the adaptability of such an article as money. When a person disposes in trade of goods in his possession, he may not desire to invest immediately the proceeds of this trade. Hence he wishes to receive in payment for his goods a money that will not shrink in value during the period that he retains

it uninvested. In other words, he desires to receive in exchange for his goods something in which the value of the goods he formerly owned can remain stored until he is ready to use it again. Convenience in storage demands that as little space as possible be occupied by the article in which the value or whatever else it may be is stored. Gold and silver, because of the great value possessed by relatively small quantities, are, as concerns the function of storage of value, peculiarly fitted for use as money.

Principles of Circulation.

The purchasing value of money depends upon the demand and supply of it, and not upon the cost of its production. The consideration that governs in fixing the price of an article in exchange is not, How much did it cost you? but, What is it worth to me? Of course its cost to the producer will influence his willingness to part with it, up to the point where he receives more for it than it cost. The demands of exchange for money will depend upon the amount of business being done, and hence the value of money will naturally be dependent upon its supply and the amount of business being carried on. Should the supply of money be insufficient to complete exchanges, money will be dear; that is, it will purchase a large amount of commodities, or prices will be low. Should prices continue falling,—that is, money be continually growing dearer,—it is evident the debtor class will be at a disadvantage; their debts, reckoned in commodities, will be steadily increasing and will be oppressive. On the other hand, an extremely cheap money, by greatly raising prices, will over-stimulate trade and lead to speculation. This is one of the almost inevitable evils of currency in-

flation. A condition midway between these two extremes is the one most sought after by financiers. A money that just turns to the side of cheapness without being cheap, will give a gentle and consequently healthy stimulus to trade.

A sudden increase in the value of money, such as would be brought about by a contraction in its volume, would lower prices from the mere fact that there would be less money with which to carry on exchanges and hence more goods would have to exchange for the same amount of money. But if we multiply money beyond the point of saturation, the amount needed to carry on exchanges in the most perfect manner, its individual purchasing power will shrink, prices will rise. The method by which money gets into circulation is sometimes detrimental to its best use, from the fact that it may interfere with normal circulation. The act of its introduction has a tendency to disturb the equilibrium of money, but this disturbance is not great nor serious. Also, the irregularities of circulation demand a considerably larger amount of money than would be necessary were the circulation more constant. Large amounts of money are hoarded or laid away for long periods, and must be replaced by other or else trade will suffer from shrinkage in the money volume.

Amount of Money Needed by a Nation.

To determine the amount of money needed by any country, it is necessary to consider many secondary matters. Of course the amount of money needed will tend to increase with the population. Aside from the amount of the population, however, the amount of money needed will be less for a dense population than for the same

population scattered widely over considerably more territory, for in the latter case the rapidity of circulation will be diminished. This rapidity of circulation is a very important factor. A country in which savings are promptly banked, when they pass again quickly into the circulation, or where money is otherwise kept in constant and rapid circulation, will need less money to carry on the same amount of business than one in which money is hoarded and circulates but sluggishly; for it is obvious that if money pass rapidly from hand to hand it will accomplish many more transactions than if it is kept for a long time in one hand. Where much business is being transacted, more money is of course needed. This brings about a condition contrary to the common belief, namely: that if commerce be increased prices will fall, because of the great need of money, unless the volume should be increased to keep apace with the increase of business. The kind of money to fulfill these conditions is one that is freely convertible, full legal tender, and convenient for a free and rapid circulation. A money that passes freely in but a part of the country will disarrange the conditions for calculating the amount of money needed to accommodate the whole country.

Monometalism.

Monometalism is a term applied to the use of a single metal as standard money. There have been instances of the use of different metals as the standard money under a monometallic standard, but gold is the metal generally employed for a single standard. With this system other metals are commonly used for token or subsidiary coins.

Bimetalism.

Bimetalism, as opposed to monometalism, is the system under which two metals are used for the coinage of standard money, either of them being a lawful standard money. Any two metals might be used for standard money under the term bimetalism,—a good many have been used; but gold and silver are the two that commonly are used, and are those meant when bimetalism is referred to. With a bimetallic standard gold and silver are coined into standard money, exclusive of subsidiary coins that may be made from either of these or from other metals. When this system is employed, a legal ratio is fixed at which the two metals are to be coined, and this ratio should be permanent.

Paper Money.

Paper money may be of many kinds. It may be in the form of bank notes; of certificates representing gold or silver deposited to their face value; of certificates representing certain forms of property, such as land, as in the case of the French assignats; of government promises to pay; or it may be simply fiat money, or paper money without security of any kind, circulating merely on the government enactment of legal-tender properties. The greatest danger connected with the issue of paper money is inflation, with its consequent evils. After one issue of paper money, others follow easily, and generally end in a commercial breakdown and great distress. The issue of fiat money has been admitted by some economists to be theoretically sound, but uncontrollable in practice, and hence dangerous. To be safe, paper money should always be limited in issue, and immediately convertible. This is

generally the case with gold and silver certificates and bank notes.

Paper Money and Bank Notes.

The amount of issue of bank notes is generally regulated by law, and since the profit resulting from circulation does not fall to the government, their issue is much more carefully restricted than are the issues of paper money from which the profit accrues to the government. They are generally secured by deposits, property, or bonds. Bank notes form an elastic kind of circulation, as they will be issued according to the demand for money. Gold and silver certificates, on the other hand, are not elastic. Government notes and fiat money may be elastic in their issue, but as they may not be readily recalled they are unsafe.

Monetary History of the United States.

In the earliest history of American civilization, the money used was the money of old countries. At times this was inadequate to perform the necessary exchanges, and acts were passed by the different colonial legislatures authorizing the use of tobacco, beans, tar, wheat, and even wampum, as a legal tender. A little later there was a certain amount of subsidiary coinage carried on by the colonies. But the most important currency action taken by the early American colonies was the issue of paper money that was floated by banks and by the colonial governments. Probably the most noted instance of the issue of paper money by the colonial governments was that by Rhode Island, where issue after issue of depreciated paper money was poured out upon the people. It all fell rapidly in value, and frequently caused great hardship and distress.

The continental currency was the next attempt of the American people to issue paper money. This, too, depreciated, and was practically a failure, having ultimately to be abandoned.

With the organization of the United States, our monetary history was marked by fewer vagaries. By the act of April 2, 1792, gold and silver standard money and subsidiary coins were authorized and their coinage begun. Previously to this, in 1786, a law had been passed making the Spanish milled dollar the standard of the United States, but no coinage was begun. Gold had been undervalued by the act of 1792, consequently was exported; and the act of 1834, changing the ratio so as to raise the value of gold, was passed to remedy this. The next change was by the act of February 21, 1853, which reduced the subsidiary coinage to the status of token money, to prevent exportation. Previously the subsidiary coins had been proportional in weight to the dollar; thereafter they were made of less than their face value of metal. In 1873 the unit of value was made the gold dollar, the coinage of the trade dollar was authorized, but the standard silver dollar was omitted. The legal-tender property of the trade dollar was removed in 1876, and in 1887 its coinage was prohibited. The coinage of the standard silver dollar was resumed by the act of 1878, but was on the government account, and not on the account of individuals as had been provided in the early acts of 1792, 1833, and 1837. By the Sherman act, in 1890, the purchase of silver for the purpose of coinage was ordered increased, but on November 1st, 1893, the clause authorizing the

purchase of silver for coinage into standard silver dollars was repealed.

No paper money was issued by the United States until 1861, at which time the "demand notes" were authorized. These were speedily followed by the "greenbacks," the issue of which eventually reached \$449,338,902.

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CHAPTER V.

CREDIT AND BANKING.

Definition of Credit.

Under the present organization of society it is impossible to carry on business without credit. Credit is the power to command present wealth or services in exchange for some assurance of a future payment or return. It is built primarily on the confidence we have in individuals to pay. Not only must we have confidence in their ability to pay, but also in their integrity. We must also have confidence in the property which is used for security. When these two conditions are secured, then there is an opportunity to carry on business in a substantial way. It is said that over ninety per cent. of the business transactions of the world is done on credit; that is, people are to this extent trusted for payment.

Instruments of Credit.

There are certain evidences of credit in the form of—first, promises, such as individual notes, bank notes, deposits, book accounts, stock certificates, and bonds; and second, certain orders, such as postoffice orders, bills of exchange, checks, and mobilization certificates. These mobilization certificates are simply orders for the delivery of certain goods, such as petroleum, pig-iron, or whisky, at a certain place. These certificates are bought and sold, and are exchangeable; their object is to facilitate exchanges in the speculative market.

Credit and Value.

The relation of credit to value is difficult to determine. Some hold that credit is capital, and hence, having value, must be wealth. So far as the individuals are concerned, the credit instruments which they hold, when they are orders or demands upon property, may be considered as individual capital, and consequently wealth; but the issuing of exchange certificates to individuals would neither increase nor decrease the wealth of the community, hence they could scarcely be called social capital. In one sense, credit is a most valuable thing, but it is a valuable means rather than a valuable substance; it has no material existence in itself, and he who holds an instrument of credit must understand that if it is a resource to him, it is a liability to some one else; if it is a credit to him it is a debit to some one else. Therefore it cannot be classified along with other capital. We must insist, that even though certificates may form an evidence of a man's resources, they do not form additions to wealth; nor can you reckon in the community's wealth the titles to the same property. If we were taking a category of the wealth of a nation, the property itself and the titles to the property could not be counted at the same time.

Advantages of Credit.

Credit has nevertheless many economic advantages. It is rather a means of wealth than wealth itself. It bears the same relation to general business that electricity and steam do to the industrial life. First, the clumsy method of barter was superseded by the use of money, and when money became deficient or too slow for the transaction

of business, credit was introduced. By means of it small sums of money may be collected in one amount and used. These small sums would be useless unless somebody was intrusted with the management of all. It also collects capital and allows it to be used through more productive hands. It likewise supplies a powerful motive for the accumulation of wealth. Without credit, few of the great enterprises of modern times could be carried on. The railroad would be built, if built at all, by the capital of one man instead of the combined capital of thousands. Even the factory and mill must be built on the credit basis, otherwise they would not be built.

There are certain forms of credit which may have exchange value, becoming wealth and capital at the same time. Take, for instance, immediately redeemable government paper. It is covered by only a partial reserve. This passes into the community as wealth and capital; however, if the government is estimating its own material resources it becomes a doubtful question whether it is capital or wealth. It cannot estimate it any other way than a form of indebtedness on the part of the government. It can be wealth to the individual who holds it only on the basis of division of wealth, he holding that which is his share; but the wealth of the community is not increased unless perhaps indirectly, by displacing more valuable money, such as gold, and using a cheaper instrument in its place. The gold then can be used elsewhere and the paper money serves to increase credit.

Credit Creates Capital.

It is not an agent of production, such as land or labor, but rather a special mode of production, a method of

trade, which has become so universal that it is recognized as an economic function, like that of labor and exchange. By it all forms of industry are quickened and the means of rapid work increased.

Effects of Overstrained Credit.

Overstrained credit brings commercial crises and panics. It promotes indebtedness on the part of the poor, and sometimes transfers wealth from a more to a less productive hand. An overstrained credit may unduly stimulate demands, and thus raise prices and introduce commercial panics.

Inflation of the Currency.

Overtrading is one of the primary causes of commercial crises. People who buy more than they can sell, or borrow money to invest in trading and business without anything but speculative hope of return, find themselves suddenly short in their accounts. When a call for cash comes there is not enough to go around, and one trading-house after another must suspend payments. The result is, that they have traded on fictitious values with the hope of real profits. This condition is frequently enhanced by an inflation of the currency, which gives undue encouragement to business on account of the fictitious profits, which seem much greater than they are. It also develops a speculative tendency, and builds up business on a weak foundation. The remedy frequently applied is to throw out more money to satisfy the demand, but this only increases the evil. Prices continue to rise, and people, in a vain attempt to realize the supposed results of these high prices, go into excessive business and over-borrow.

Finally, there is a collapse in these fictitious values, and a failure of certain houses, which pull down others and involve very many. There is then a long period of commercial retrenchment on account of the contraction of business; money is scarce, and business reaches a point of stagnation.

Banks as Centers of Business.

Banks are centers of business, because they furnish the free capital with which to carry on old business or to establish new. They are sometimes called the nerve-centers of the business system; hence they are indicators of prosperity or of depression, and a sound banking system is always essential to a healthy commercial condition.

Banks act as depositories of funds. They have sprung up naturally and essentially for this purpose. Were all the banks abolished to-day, some method of banking would be instituted before the day was over. Serving as depositories, they are the custodians of the funds used in carrying on trade. They also serve as means of making issue of money or bills for the purpose of exchange, although this may not be an essential function of banks. They are used almost universally for making deferred payments, for collecting and discounting bills. As such they have been regulated in different ways in different countries.

Rise of Banking.

The earlier banks began with a very limited business. The Bank of Venice was one of the oldest organized, established in 1171 as a bank of deposit. It issued no notes, and transfers could be had only on the books of the bank. The Bank of Amsterdam, organized in 1609; the

Bank of Hamburg, in 1619; the Bank of England, in 1694; the Bank of France, in 1800,—all had rather primitive banking functions, excepting the banks of France and England. The Bank of Venice from its foundation was controlled by the state, and was a mere method of security against bad paper and bad coins. The Bank of Amsterdam originated from the distrust of poor coins, and its paper guaranteeing full weight was held at a premium above the cheaper coins.

What Constitutes a Sound Banking System.

A banking system, to be sound, must have a sufficient banking capital, adequate to the business done. Certain laws should be established in regard to deposits, loans and circulation, invisible and tangible property, at all times sufficient to meet the legitimate demands. Beyond this, in the case of banks of issue the notes should be doubly secured.

There are two great methods of banking: one is the state banking system, in which the government becomes responsible, owning and operating its banking business; the other is a private banking system, in which individuals are permitted to carry on independent banking. Sometimes private banks have a large amount of government inspection and control, which makes a third class. A free banking system permits certain individuals to carry on banking under a general law established by the government. All that is required is to fulfill certain conditions, no requirements excepting for safety and general convenience being established. In such cases the bank notes

should not be legal tender, but should simply be secured by the resources and assets of the bank.*

Bank of England.

The Bank of England was chartered in 1694, and, like most of the early banks, had its origin in financiering. Certain persons agreed to loan the government £1,200,000 for the purpose of carrying on the war with France, on the condition that they should be organized and chartered under the title of The Bank of England. One of the favorite conditions also was, that it had a monopoly of the note issue,—all corporations, excepting the Bank of England, having more than six persons, not being allowed to issue notes. In 1826 branches of the Bank of England were established at different places, and joint-stock companies situated more than sixty miles away from London were allowed to have the privilege of issuing bank notes. This curtailed to a certain extent the monopoly enjoyed by the Bank. In 1844 Mr. Peel's celebrated Bank Act separated the note-issue department from the banking department, and limited the paper currency of the country so as to make it rise and fall in conformity with the movement of gold coin and bullion. It was provided that the issue department might send out £14,000,000 of notes based upon government securities, and for every note issued above that amount its equivalent in gold coin or bullion must be deposited. By the process of absorbing the liabilities of other banks the amount of notes issued on government security has been increased to £16,800,000. Thus it appears that the only way of increasing the circulation of the Bank is to bring in gold for deposits from

* Such notes should be allowed to circulate to such extent as the credit of the issuing bank makes people willing to accept them.

the outside, which renders it elastic up to a certain point only.

The notes of the Bank of England have been legal tender since 1833, "so long as the Bank of England shall continue to pay on demand their said notes in legal coin." The issue of bank notes in 1896 was for £59,776,325, and £42,968,325 of this was issued on gold coin and bullion.

Bank of France.

The Bank of France was organized in 1800, but was reorganized in 1848. It, with its branches, is the only bank of issue in France. Its capital when it was first founded was 30,000,000 francs, which has been gradually increased to 500,000,000. As far as its capital is concerned it is a private institution, belonging to the shareholders, but the governor and two assistant governors are appointed by the president of the republic, and are removable at his will. It may issue legal-tender notes to any amount it pleases, according to charter, although the amount issued is limited by law to 4,000 million francs. Under this limit the whole amount is left to the discretion of the managers of the Bank. The denominations of its notes range from five francs to 1,000 francs. These bank notes are payable in coin on demand, in either gold or silver. In practice the government pays gold or silver, to please the person who presents the note; but in case of deficiency of gold it puts a small premium on gold, in order to keep the equilibrium. The coin reserve is very large, having been, in 1895, 3,184,000,000 francs, of which nearly half was silver.

National Banks of the United States.

The banking system of the United States has had a peculiar history. The first and second national banks of the United States were more or less under the patronage of the government, though they were semi-private institutions. The government, finally failing in its banking project, went out of the business. During the whole period certain private banks were chartered from time to time. The banking system was built up from charters issued by the States, or under general laws of the various States of the Union.

In 1863 the present National Banking System was established. The object of its establishment was to unify and render secure the banking system of the United States. The laws for the establishment of the State banks were so various, and the advantages taken of these laws were so great, that it led to an unsafe and unsound system of banking. Much of the paper became depreciated and worthless and some of the banks failed, on account of the loose legislation. There was no unity, no system, no uniform foundation for credit. A banking system was proposed which should remedy these evils. Another object was to market the United States bonds, they being used as security for the circulation of these banks.

Organization.

Any five persons in any city or town could organize a bank, by complying with the law. In places of less than 6,000 inhabitants there must be \$50,000 capital; places having over 6,000 and less than 50,000 inhabitants could establish banks with \$100,000 capital; while in

places having over 50,000 people there must be a capital of \$200,000. One-half of the capital must be paid up before beginning business, and the other half within five months. For the security of the circulation it is necessary that the bank purchase an amount of bonds, which are to be deposited in the Treasury of the United States. Ninety per cent. of the par value of the bonds may be issued in uniform bank notes signed by the president and cashier of the bank issuing them. A fund equal to five per cent. of this outstanding circulation must be deposited at Washington for the redemption of these notes. It is not necessary that the bank issue notes at all, but it is required to keep on deposit with the Treasurer of the United States a certain amount in bonds. For banks of \$150,000 or less capital, the minimum is one-fourth of their capital, and for banks of more than \$150,000 it is \$50,000.

Regulation.

The whole system is placed under severe rules, regulation, and government inspection. The notes are doubly secured by the resources of the bank, double liability of stockholders, and the bonds deposited with the United States Government. Depositors are secured on the resources of the bank, including the double liability of stockholders.

The banking and currency law of March, 1900, made a few very important changes. Among other things, it provided that the gold dollar consisting of 25.8 grains of gold nine-tenths fine should be the standard unit of value, and all other forms of money issued by the United States should be maintained at parity. It provided for the re-

demption of the coin certificates of July 14, 1890, in gold, and for the maintenance of a reserve fund for that purpose. It further provided that silver certificates of over ten dollars denomination should not be issued except in case the Secretary of the Treasury might, if he deemed it necessary, issue not to exceed in the aggregate ten per cent. of the total volume of said certificates in the higher denominations. The law also permits the establishment of national banks of \$25,000 capital in towns having not over 3,000 people. For the increase of bank-note circulation it was provided that notes might be issued to an amount equal to the par value of the United States bonds deposited for that purpose. Also, that when the two-per-cent. refunding bonds are used for the purpose of securing circulation, the taxes on average circulation of notes shall be reduced to one-half of one per cent. per annum. The law further provides for treasury divisions of issue and redemption, which keep all of the records and accounts relating to the issue and redemption of United States notes. The purpose is to separate the note-issue department from the ordinary fiscal work of the treasury. Other provisions of minor importance relating to the banking and monetary system of the United States were made. Upon the whole, the banking system as now established represents a safe, substantial and fairly elastic system.

One of the greatest difficulties to be overcome in any bank-note issue is that of inelasticity. The present national banking system of the United States has been defective in this respect. Secured by United States bonds, the amount of the circulation expanded and contracted accord-

ing to the amount of bonds purchased. When bonds were at a very high premium it proved to be a losing business with the banks, and they withdrew their circulation just at the time when it was most needed by the people.

Canadian Banking System.

The Canadian banking system seems to have more elasticity in this respect. There are central banks and branch banks. Sixteen banks maintain nearly 340 branches, while of the remaining twenty-two banks, eight have no branches at all. Notes may be issued up to the paid-up capital of each bank, with the exception of the Bank of British North America and La Banque du Peuple, neither of which is permitted to issue circulating notes to an amount greater than seventy-five per cent. of its paid-up capital unless otherwise provided for. The notes are secured against the assets of the bank, including the double liability of stockholders. Each bank is required to keep on deposit an amount equal to five per cent. of its average circulation for the previous fiscal year. This deposit bears interest at the rate of three per cent. per annum. This makes a redemption fund which shall be used for the payment of the notes of any failing bank if such bank does not make provision for such payment within two months after the date of suspension. By means of establishing various branches the demands of the people are fully met, and by the method of issue such elasticity is secured that the amount of notes sent out varies twenty per cent. above normal circulation when excessive demands are made for currency.

Savings Banks.

These are among the best modern institutions for the encouragement of thrift and industry. The question of saving means simply that the individual will deny himself unnecessary and trivial expenses for a larger and better use of the money at other times. One of the unfortunate things regarding savings banks throughout the Union is that they have not been properly restricted according to law, and have been left to private individuals who have not been responsible agents; hence the failure of their savings banks has been disastrous to many communities. The failure of the savings banks has a more demoralizing influence on humanity than the failure of any other. If private parties are to be allowed to carry on savings banks they should be under the most strict governmental regulations, and actual security of the deposits guaranteed by the state.

Postal Savings Banks.

Several countries have facilitated the method of saving by establishing postal savings banks; that is, the establishment of savings banks in connection with the post-office. A card having room for a certain number of postage stamps is issued for the smaller deposits. When a postage stamp is bought it is placed upon the card; when the card is full it is returned, and credit given for the amount on the card. Larger amounts are deposited directly, and credit given on the whole amount. Interest is paid on all of these deposits. The deposit allowed by one individual is limited. The whole system is one of economy, from which the banking principles reach the

people in the most convenient way. Every state would find this a convenient and economic method for encouraging savings and developing the banking system.

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CHAPTER VI.

PROCESSES OF EXCHANGE.

Organization of Exchange.

Exchange is one of the most important branches of Political Economy, as it permits the utilization of all surplus products of individuals or nations. People are thus enabled to carry on certain lines of industry, and exchange their surplus products for the surplus products of other industries. This brings the utility of the whole world into service, and saves time and energy.

In primitive society exchange was very light. It consisted in moving those articles possessed of relatively great value in small compass or bulk, and was not carried on systematically. By-and-by we find the development of a systematic trade through peddlers who carried their wares about with them, or by caravans exchanging the surplus products of different countries. Then in the early periods of civilization, down to the Middle Ages, a large proportion of the goods manufactured was consumed at or near the place of manufacture. The trading by ships on the sea brought various luxuries to the ports for exchange; but after canal, railroad, river, lake and ocean traffic became developed, all material, light or heavy, is easily exchanged.

So complete is this exchange of surplus products that even vegetables are transported around the world. One can enter any town in the interior and find there the

fresh fruits of nearly every country. To-day we find exchanges being organized throughout the world: certain persons handle certain kinds of goods,—others, other kinds; certain persons agree to carry goods from place to place; certain organizations are ready to furnish certain goods at any time to any reasonable amount.

Importance of Exchange.

All legitimate exchange is an increase of utility, for it enables persons to exchange the surplus of one article for another of which there is a deficiency. A large surplus of corn in Kansas would remain useless, to decay or to be used for fuel, unless it could be exchanged for machinery or furniture or dry goods or the vegetable products of other countries. Exchange enables Kansas to produce corn, wheat, and cattle,—those products for which it is particularly adapted. Certain territories that can produce articles at a greater advantage than others can exchange these articles for the others which are necessary or convenient, created in other districts, at great advantage. This increases the productivity of labor and of capital, for it enables various persons to be encouraged in pursuits for which they are particularly adapted, and they must thus pursue those industries which are best suited to their capacity and condition. It is evident that in all legitimate trade or exchange, all parties engaged are profited thereby. The theory that if two persons trade one must gain and the other lose, is entirely improper. The fact is that people who trade should each gain thereby. That is the real fundamental principle in all exchange. The poorest workman in a small town has the advantages of

exchange. While he works by the day in building stone walls, he sits down at a meal where the table is supplied from the products of the world, and he enjoys his clothing from various countries.

Means of Exchange.

There is developed a large class of traders whose entire business is to make exchanges between different communities, countries and individuals. Those people are indispensable to modern industrial life. Various attempts have been made to get rid of "middlemen," who bring the producer and consumer together for the purpose of exchange. This attempt has failed. To a certain extent this class has become too large in many instances. In our small towns as well as in our large cities there are too many tradesmen and too many agents who carry on legitimate business. From time to time this readjusts itself, and the tradesmen turn to productive enterprises.

To-day we find the postoffice, the express companies, freight companies, railroad and transportation companies always ready to transport goods with facility and dispatch to any part of the world. In the aid of these the telegraph, the telephone and the postal service render communication almost perfect. In connection with this we find the use of many great facilities for trade, but more expressly the credit system, which is an instantaneous process for meeting the demands of exchange. The banking and credit systems of the world complete this great mechanism of exchange. The clearing-houses of countries and of the world render the system of debt-payment almost perfect. Back of all this economic mechanism is the legis-

lation of states and nations concerning the administration of commerce. This involves a system of rules and regulations and laws for the proper conduct of all such payments and of all forms of commerce and trade.

The Market.

The market is a place where buyers and sellers come together for the purpose of exchanging wares. This may be either local or general; it may be either a retail market or a wholesale. The fundamental principles are the same in either case. For example, there may be such a thing as a horse market. This may be local, where a certain number of horses are offered for trade and a certain number of buyers come together to make the exchange. The idea of a horse market may be so enlarged as to include the market of a whole country, or of the world, in which the horse market is daily weak or strong and horses may or may not be in good demand. The retail market is a place where goods are sold in small quantities. The rates are different in each case, and market quotations have become generalized. In either case there is no market, so called, until the regular price has been established according to the law of supply and demand,—the amount offered on one side and the amount demanded on the other. By the use of a well-established market people understand whether they are paying too much or too little for any line of goods.

Domestic Exchange.

Domestic Exchange is a term used to designate local exchange when applied to a nation or community. It is an exchange of manufactured goods or farm products, or

raw materials or finished products. Indeed, all of the various products of a country can exchange for home consumption. This is called the Domestic Market. In a domestic market an article usually has the same price over the entire country plus or minus the cost of transportation. Yet there are great centers like New York and Chicago which have a tendency to fix the price of domestic products. However, every small town has its own local market, and prices will vary slightly according to conditions.

Foreign Exchange.

Foreign Exchange is the trade of one nation with another. In this respect the nation does not trade as an individual with another one, but settles its balances. Individuals of one country trade with individuals of another, but in the settlement of balances a system of barter is introduced as between one nation and another. The settlement of balances between one country and another is carried on by the purchase and sale of exchange, so that the debts of one country offset the debts of another and the balances are paid. Individuals of each nation will trade with one another when it is an advantage for them to trade, and when that advantage ceases trade will cease. Long-continued trade is kept up only on the basis of mutual advantage.

International Values.

Owing to the fact that one country may produce an article much cheaper than another, prices in one will vary from those of another, and there will be established certain international values when there are no restrictions.

However, international trade is not widely different from domestic trade, except in the method of settling balances, and even that difference is not marked. The mode of foreign exchange varies little from that of domestic exchange. The buying and selling between foreign countries is conducted very much the same as buying and selling between different parts of one great country. If a man in California buys a bill of goods in New York, he buys exchange on New York for the payment of those goods, and the State of California has not transacted any business with the State of New York. The same is true with the man in New York who buys a bill of goods in London: he pays for them by purchasing exchange on London. The American government and Great Britain are not parties to the transaction, except so far as they regulate it by laws of exchange. Hence it must follow that international values are not widely different from national values. It appears that very many false notions have risen in the minds of students on account of the carelessness of writers on this point. The trade of Great Britain with the United States is not a national process, but an individual affair. The effects on the nations may vary on account of the shipment of gold from one to the other, but the same might occur between New York and San Francisco. If a shortage of gold occurs in a nation it may affect government financiering, while the difference in the amount of gold on hand between New York and Chicago would have nothing to do with our national financiering. The difference between our exportation of gold between New York and London might have considerable effect on our national financiering; otherwise the principle remains the same.

There are, however, such things as international values, dependent to a large extent on the immobility of labor, capital, and the various conditions of business. Because transportation and communication are so much facilitated, there is a tendency for wages and interest to be equalized all over the globe, and also for the same grade of goods to have the same price everywhere, plus or minus the transportation. Hence tradesmen make more out of the element of time than anything else, which of course from an economic standpoint tends to reduce profits more to the average of interest on capital, plus the service of management.

There are what are known as natural advantages for the production of certain lines of goods, and to these may be added artificial advantages, including long experience in a business and the development of skilled labor, which make a difference in values of articles and stimulate international commerce. International trade thus enables a community to furnish goods which cannot be produced at home on account of the want of certain necessary requisites, and also, through the process of coöperation, which enables a country to dispose of those surplus goods which it can produce most advantageously in exchange for those which cannot be produced as cheaply as in other countries. But it does not follow that because articles can be produced cheaper in another country, a given country should fail to manufacture them; for it is evident that if the prices of any given four articles (A, B, C, and D) are less in Germany than the prices of the same four articles in the United States, and that prices of any other four articles (F, G, H, and I) are greater in Ger-

many than the same four articles in the United States, Germany would not manufacture all of the goods consumed of the first four articles and the United States all of the second four, although there is a tendency that way. The exportation of the first four articles from Germany to the United States and the second four from the United States to Germany would tend to influence trade. The demand having been satisfied on most articles, trade would fall off, while on others it would continue till the balance of trade must be paid in cash. When the balance of trade is paid in cash, this importation of gold into the country makes prices high, checks exports into the country receiving the gold balance, and increases the exports in the country sending it. The first effect is a reduction of trade in those articles in which there is a small difference between domestic and foreign prices, while the reduction fails to affect the trade between those articles in which there is a large difference. Therefore, in the course of trade it is easily seen that those commodities whose cost of production is very nearly the same in the two countries trading will soon cease to be exported, while those in which there is the greatest difference will continue to be exchanged. Now this difference of cost of production is largely owing to a difference in advantages. It is evident that a country will create and export those goods which it can most advantageously produce, or those in which there is for the time the largest difference in price in the two countries. Yet, in considering this, the real basis of operation is found, not in a comparison of the difference of cost of producing the article in the two countries respectively, but in the relative cost of producing within a given country a

certain amount of the articles for which there is a steady demand. In this argument it is understood that the price of production in a given quantity is estimated, as hitherto stated, by the subjective value; that is, the demand or marginal utility. But it is not intended to go into a discussion of the theory of value, as it is presented fully in another place.

A country may be able to create all of the articles which it imports from another country more cheaply than those same goods can be created in the country from which they are imported, but it will not do so, because it can devote itself more advantageously to the producing of a few of those articles in which the price is very different between the two countries, and exchange those for the goods which can be produced most advantageously in the country from which the goods are imported. With our present facilities, and without a protective tariff, we could produce all of our cotton and woolen goods in this country, and many of them as cheaply as the imported goods plus the transportation. But we can devote our energies to industries which yield us a larger return, and import many of those articles in which there is a small difference or no difference between the cost of production here and in the country from which they are imported. It is not here intended to discuss the principle of the development of a variety of resources of a nation and the employment of the capital of a community in different ways for the sake of the development of the resources of the nation and the building of national credit and independence through diversified industries. Nor is it intended to show the advantages of free trade by allowing a nation to do those

things which it can do most advantageously. A carefully administered tariff will observe this very thing, and will levy taxes upon those goods which may be most advantageously manufactured in other countries. Many persons have drawn an important conclusion here in respect to the evil effects of the tariff in turning a nation from a natural channel of manufacture and trade. The evil lies in the method of managing the tariff, rather than in the tariff as an institution. (See Book IV, ch. IV.)

Balance-of-Trade Theory.

There is a theory that in trading, the nation which receives the largest payment of cash balance is really the gainer in trade. This may not necessarily follow. It will depend largely upon the condition in which the articles are manufactured and sold. A nation may be importing goods from another country in such an advantageous manner to herself that those goods are worth more than cash sent out, plus the cost of transportation; and indeed it is a supposition of trade that if a man spends a dollar for a hat, the hat is of more advantage to him than the dollar, and what we call wealth and the well-being of a nation is the goods that that nation may import which are of greater service than the money sent out. But owing to the fact that the goods are yet to be marketed, and that money or cash is always marketed, and because it takes a sufficient amount of free capital to run a business of the nation, a large and sudden exportation of gold in the payment of the balance of trade will create alarm in the minds of financiers, who see that the means of carrying on trade prosperously are being shortened. In reality,

however, a greater value has been left in the country in the goods yet to be marketed.

Also, the old feeling that if two nations trade, one will lose and the other gain, led us to false notions of the importance attached to foreign trade. The fact is, that nations will not trade with each other unless it is an advantage to both; and they may trade and both make by the transaction, or they may both lose temporarily,—though one cannot make and the other lose perpetually. We should be careful not to measure the advantages of international trade by the balance of the imports over the exports or the excess of the exports over the imports, for the real advantages lie back of these things which are seen. In the long run, owing to the balance of accounts for cash, the trade of different countries balances. The old economist's idea was, that the excess of exports over imports represents the gain of the nation in trade. The free-trader says that the excess of imports over exports represents the nation's prosperity. These statements are in part true, for balances represent only the margins of trading in the different countries. The real advantage, as I have stated above, is in the fact that parties gain in the transaction by having an increased amount of wealth for consumption and utility. As Cairnes says, "It would be just as reasonable to represent the advantages of learning as measured by the salaries of the teachers, as to represent the advantages of trade between two countries by the margins of profits of those engaged in trade."

In estimating the true balance of trade, there are several things to be considered. It must not be limited to the excess of goods exchanged for goods. The whole ac-

count of debit and credit must be shown. There is the cost of transportation. The freight charges are always a burden of trade, and go ultimately to the country that furnishes the transportation. This freight on goods will vary on different articles, being much larger in proportion on heavy goods and raw materials than on light goods and highly finished products. Therefore, in estimating the value of goods of one kind or raw material exchanged for goods of another kind, a highly finished article, freight is a great item in showing a balance. Again, there are several accounts which are settled by international balance, such as interest on capital invested, the expense of foreigners living in the two countries, bankers' commissions, and various other items. These must of necessity be taken into account before a true estimate of the balance of trade is made.

It is easily seen that our domestic trade is after all of greater importance than the foreign trade, as far as national prosperity is concerned. Hence it is that while the latter should be encouraged, nothing should be done to impair the former.

References: Goschen, Foreign Exchanges; Mill, International Values; Bullock, Introduction to Economics.

CHAPTER VII.

COMMERCIAL CRISES AND PANICS.

Definitions.

Commercial crises, trade depressions, and panics are terms used to express short phases of one great movement; and indeed are frequently used as symptoms of one movement, without discrimination. A crisis or panic is a stoppage of the movement of trade, during which every one wants to sell, nobody wants to buy. Broadly stated, a panic is due to overtrade, and its greatest condition is the absence of credit. A panic is a widespread loss of credit, but sometimes the term commercial crisis is used to cover the whole period of depression of business. It would be better, scientifically, to hold that the term crisis is simply a point in the movement at which a general breakdown in business occurs; the panic, that which immediately follows a breakdown; and the trade depression, that which occurs before the crisis, as a cause, or, after the panic, as a result. At any rate, experience teaches us what the thing itself is, although it is difficult to reason about it unless we come to some agreement upon the terms in use. Although it is easy to understand what a panic is, to philosophize about it, to define it, and to trace out its causes and effects, are certainly very difficult processes.

A commercial crisis is a sudden disturbance in the

money market, and arises chiefly from loss of confidence in the ability of debtors to pay. It turns upon the pivot of credit, and is immediately dependent upon the amount of available cash for the payment of obligations. The trade depression indicates that the manufacturers and the producers have no confidence in the ability of the community to absorb the manufactured or funded products or raw materials.

Trade depression always comes from a failure of production to adjust itself to the conditions of consumption. It is sometimes attributed to overtrading or overproduction. Overproduction is a very indefinite term as it is used to express the satisfaction of general wants. So far as that is concerned, there is no such thing as overproduction, for the general wants of a community are never supplied; the desires always exceed the means of satisfaction. It may be used also from the standpoint of the producer, who finds a certain stoppage in the market and more goods on hand than he can dispose of. He attributes it to overproduction. It may be used on the basis of particular wants of the consumer, in which he finds one want relatively satisfied while others go unsatisfied. The real fact of the case is, that underproduction or underconsumption could be used just as well as overproduction. In the case of underproduction, certain investments of capital and labor fail to yield a return; there being no income from this source, there will be underconsumption on certain lines of goods. If producers have thrown this class of goods upon the market, there will be a glut in the market and an overstocking of the market, which is usually termed overproduction. It

may be that excessive stimulation of certain industries will throw a large amount of goods on the market, which will make an apparent overproduction, although the real situation in the case is a lack of normal consumption. This causes a disturbance in trade and a general depression of business. It is rather an uneconomical or abnormal distribution of products, labor, capital, or services, in production and distribution.

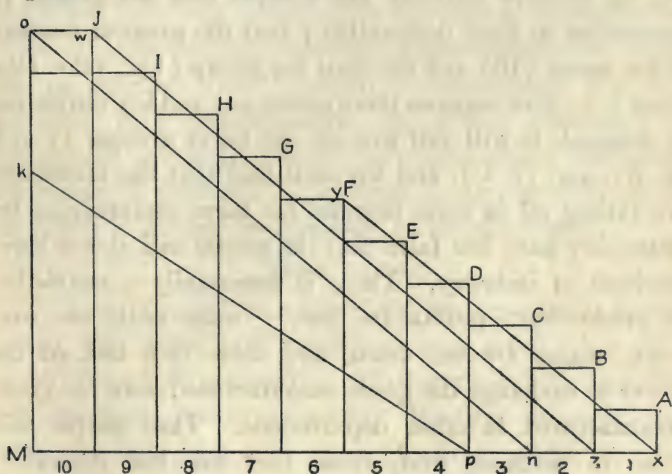


Diagram I.

We know that a panic is a reaction after an excessive hope,—after speculative enterprise; we know that a panic is the result of overtrading. There is first a speculative expansion of certain industries, not necessarily all industries, but is an overproduction of those industries, which results in the fall of prices below cost. Then merchants who are handling the goods are unable to pay the producers for the stock already in hand, and cease to order new

goods; the producers in turn are unable to pay the advances made by the banks, and a failure of banks and business houses follows; then a general alarm; and finally, a panic.

Course of Trade in Depressions.

This movement is graphically represented by this diagram. Suppose all of the commodities in the market making up creative industry are divided into ten groups in proportion to their desirability; that the greatest demand is for group (10) and the least for group (1). (See Diagram I.) Now suppose there comes any sudden restriction in demand, it will fall first on the lower groups, (1-A), (2-B), and (3-C), and we shall find that the merchants are falling off in their demand for these commodities because they have less faith that the people will absorb these products of industry. There is necessarily a restriction in production; profits are lower; some mills are shut down, wages are cut down, and there is a lack of the power to exchange the goods manufactured here for goods manufactured in other departments. Thus people will cease to demand, first, those that are less desirable; namely, groups (4-D), (5-E), and (6-F), and thus managers of this group will find less demand for their products. This shortened demand will again cause alarm to merchants, and they will buy less of the products of groups (4-D), (5-E), and (6-F), and these in turn must follow the example of the first three groups; namely, shorten time, reduce wages, and restrict consumption, and in turn affect the groups above them, (7-G), (8-H), and (9-I), just as they were influenced by those below

them. Whatever the cause of any sudden depression, or restriction of any branch of industry, it works this way on other branches, tending to depress them and draw them into the general movement of depression and panic. It is easy to see that when this decline extends throughout the entire community, when there is a fear of manufacturers that the public will not absorb what they are producing, and a fear of the traders that their customers will not absorb what they buy, affairs have reached a critical point. When business resumes, it is always with the reverse of this process, whether slow or rapid in movement: first one industry, then another starts up, giving confidence to others, and gradually there is a return to the legitimate conditions of business. The lines *xy*, *no*, *zw* and *pk* respectively represent the progress of the depression.

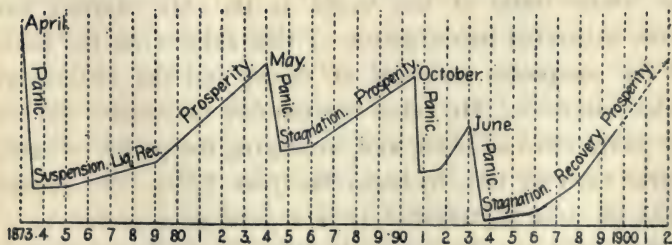
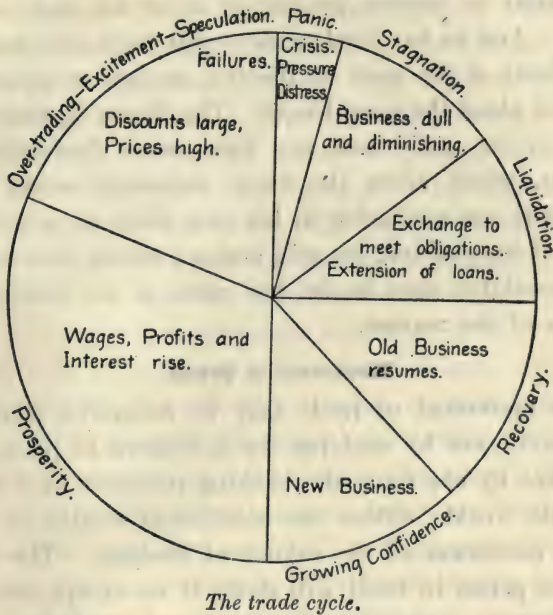
Trade Cycle.

We have observed how the whole business world is connected, and every part dependent upon every other part, so that the whole productive, distributive and consumptive enterprises are closely connected. We have also said something about the great extension of credit, by which business is carried on with a very small amount of real capital in sight. Credit to a large extent is a psychological condition of trade, and results of overstrained credit give rise to psychological phenomena. When business is good and everything moving in proper equilibrium, credit begins to expand. The result of expanding credit is a larger use of credit, the encouragement of more business enterprises, a great activity in trade, and gradually rising prices. These high prices in turn promote stimulative

enterprises, and these stimulative enterprises tend to extend credit still further, until finally, a slight alarm, a failure and a refusal to buy, or some other cause, precipitates a sudden panic,—the bubble of trade is burst. First comes speculative expansion of certain industries; second, the excessive expansion of credit; and third, sudden change in the demand for certain goods, which leads to undue production in one line or stops production in another line. This leads to trade depression and crisis, which may precipitate a monetary panic. (See Diagram II.)

An inflation of the currency may to a great extent, by inducing these relations which I have noted, lead on to the conditions of a panic, and the panic be precipitated by some sudden cause. Also, a sudden contraction of the currency, which causes a scarcity in the money market, may cause certain industries to be cramped in their operations, and lead on to failure and a panicky condition of the market. It will be observed from this, that the banking system is closely related to every crisis or panic that has ever occurred; because the banks in modern times represent the nerve-centers of business, and through them are indicated the kind, nature and amount of business being done in the country. Without credit, banking itself cannot exist. If banks would take in only so much money and keep a reserve for every dollar taken in, there would be no banking. Consequently, they represent the centers of credit, and are exceedingly sensitive to any movement in trade or business. Though banks cannot be called the causes of panics and crises, it may be said that illegitimate banking and an improper extension of bank money

have not only brought about monetary panics, but have intensified panics brought on by other causes.



Line of business prosperity, 1873-1900.

Diagram II.

Mr. Jevons has endeavored to show that industrial crises, which often bring about panics in the money market, occur in regular periods of about ten and one-half years. And he has tried to show that these are caused by the effects of the spots on the sun, as they reappear in a cycle of about the same length. The theory is, that variations in the sun's heat and light cause fluctuations in harvest, which affect the whole industrial world. Mr. Jevons is not conclusive in his own mind as to the tenability of his position, but still makes a strong showing that this possibility may be the real cause of the various conditions of the market.

Movement of Prices.

The movement of trade may be recounted chiefly in two ways: one by studying the movement of prices, and the other by observing the banking processes of a nation or of the world. Either one is sufficient to give an index of the movement of the volume of business. The movement of prices in itself will show, if we except abnormal interferences, approximately the exact condition which the whole trade of the world is in. Mr. Jevons has made a careful investigation of this subject on the basis of the composite standard of value, and the method of index numbers. He takes the number of articles during the years 1845 to 1850, and, averaging the prices of each, marks each at 100, to begin the year 1850. No matter what its unit is, whether it is a yard or a pound or a bushel, or a ton, he marks it 100. Now, as prices rise above or below this, a certain per cent. is added to or taken from 100. Then the percentage can be averaged, and

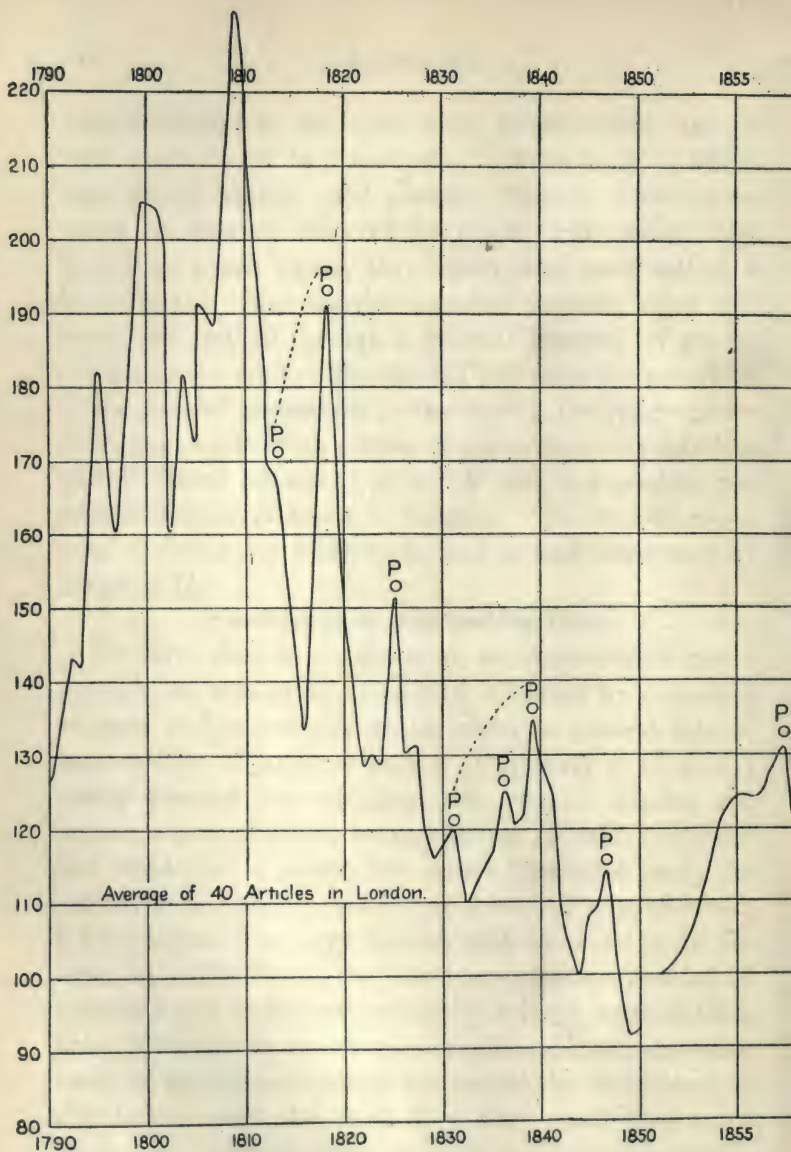
the general movement of prices indicated. (See Diagram III.) This method of indexing prices is a means of determining the rise or fall in money; thus, where the standard of measurement is gold, the comparison of prices of forty or one hundred articles through a period of years will show the rise or fall in the purchasing power of gold. The same may be true of silver. We shall often find arguments set forth by which people try to measure gold with silver, saying that silver falls, but gold does not fall in price; while the people on the other side say that gold rises, that silver does not fall;—when the only true way of comparison is to measure the silver prices of these 100 articles and likewise the gold prices in turn. By that means you will get the just relation between gold and silver; and it is upon this basis that we show that gold has been increasing in value during the years 1873–96. We shall see by this chart that there has been a tremendous fall in prices since the year 1873. We have come down from the position we were in in that period, step by step; and this does not mean a coming down from paper-money prices to gold prices. The gold prices of all articles the world over have fallen. I say all articles,—the *average* of all articles has fallen, because, owing to certain excessive demands for an article over and above the supply, it may rise to a very high price while other articles remain low. But when we come to average them all, we have a rude approximation, at least, of the rise and fall of prices. Men who were in business in the twenty-three years from 1873 to 1896 know how difficult it was to fight against this continual falling in prices. They took on a lot of goods when prices were down, and they

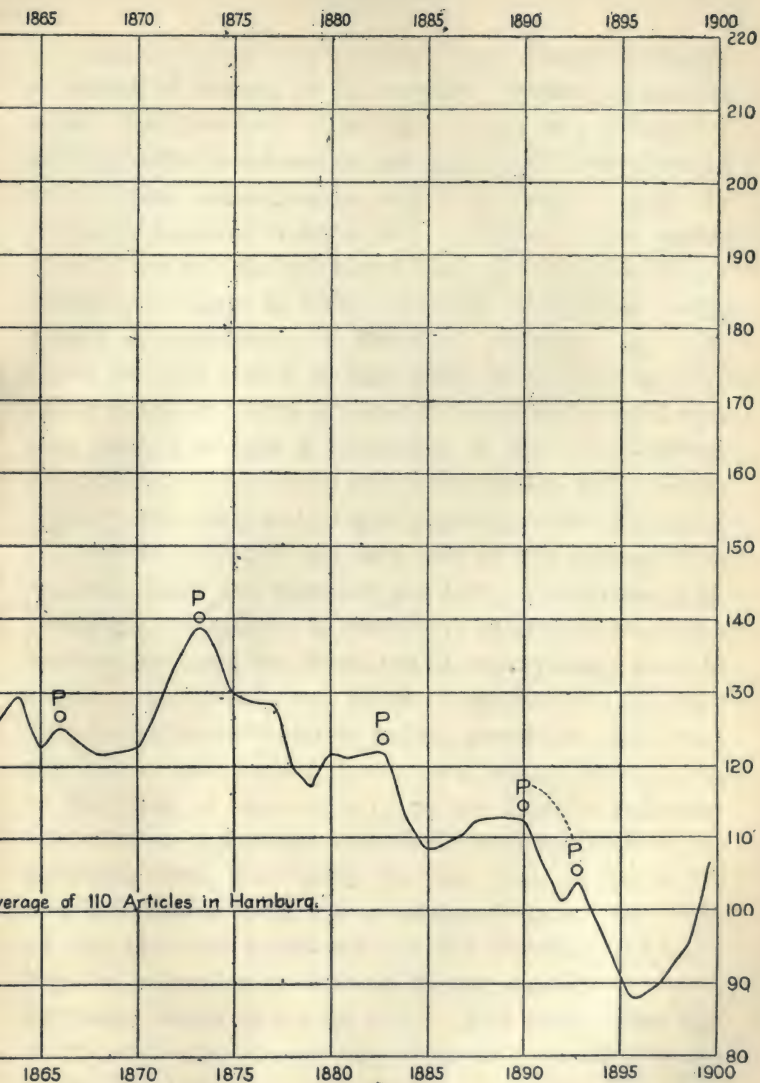
looked forward to the time when prices would rise, or when there should be a movement or brisk trade in which they should realize good profits. But they were soon aware of another downfall in prices, and though they bought at a low figure, they found they must sell at a lower figure. Men bought land and property upon this basis, and lost all through a gradual lowering of prices.

We may observe by Diagram III that there are two kinds of commercial movements in the world: the rotary movement, running through a cycle of years, approximately ten, and the linear movement, in which there is a gradual rise or a decline in prices or in business. The shorter movement is called the trade cycle, and is well illustrated by Diagram II.

Warnings of an Approaching Panic.

We have first a symptom of an approaching panic through the wonderful prosperity indicated by numerous schemes and enterprises of all sorts; a general rise of commodities, of lands, of houses, of property of all kinds; steady demand for workmen; the rise in salaries and wages; a general desire for speculation in order to become rich suddenly; a public that seems blind and easily deceived; great luxury, leading to excessive expenditures; a hopefulness that large returns will be made in all enterprises. The banks, too, show a very large amount of discounts and loans, and ordinarily a large issue of bank notes, although in recent times in America the excessive value of government bonds has caused the retirement of circulation; and also there is a very small reserve in specie, and deposits begin to grow small in comparison with the discounts. Then, suddenly some cause brings





on a crisis: it may be a new tariff law; it may be change, or threat of change, in the monetary system; it may be a hint that somebody is failing; it may be a collapse of some speculative scheme on the other side of the globe of far-reaching consequences, which suddenly causes the wheels of business to stand still. There is a short period of what we call the genuine panic: it is a scramble for funds; a struggle to make both ends of business meet; a lack of confidence; a flurry in business,—and then comes the dull period of stagnation, when there is a lull in the storm, and there is virtually no business—as if each man paused to take a reckoning, to find his bearings. Then follows a rapid and active liquidation and a steady recovery, or a slow and painful liquidation and a recovery still slower. Finally, the last part of the depression is reached: loans and discounts are few; money reserve accumulates; circulation is restricted; interest is low, thousands of workmen are forced out of employment; a cut in wages; a cut in salaries; prices of commodities fall very low; no confidence whatever exists; merchants order from day to day, from hand to mouth as it were; factories run on part time, or stop entirely; no one dares to make any new ventures in business, and all old business is run at the minimum rate. We observe also that these conditions are readily indicated by the balance-sheets of banks. As a rule, we may say when prices are high and discounts and loans large in proportion to deposits, having steadily increased for years, danger is not far away. And again, when discounts and loans are not only large in proportion to deposits, but have increased steadily for years, and there comes a sudden falling-off for a time, but to increase again

suddenly, danger is apparent. This is the record of the banking balance-sheets of the world in their relations to panics and crises.

Precipitation of a Panic.

But when we reach a point where there is widespread idleness in the country; when discounts and loans have been very much reduced; when bank reserves have been greatly increased; when salaries have been decreased, and interest rates are low; when everybody is cautious, stimulation itself dead; when expenditures are cut down to the lowest possible notch,—we are not far away from an improvement in business. It may come suddenly, or it may be a long, slow process. This period is called that of liquidation and recovery. During this period old debts are settled; exchanges are made; either voluntary or forced liquidation takes place; loans are slowly extended, and old business resumes. We reach then the stage of what we may call confidence, and this growing confidence encourages new business; and then we enter a long period of what may be termed prosperity, lasting usually from four to seven years. Wages and interest rise, and then we pass to the period of extreme overtrading and speculation, and discounts are large and prices high, and an over-extension of credit bringing us to the eve of another panic. The trade cycle is completed. This illustration is somewhat conventional, yet in its chief characteristic it is the true trade movement that has been going on for the last hundred years, and even longer. We may notice a graphic conventionalized movement of trade in the United States from 1873 to 1893. We may see there,

beginning April 1st, 1873, a sudden panic; a short period of stagnation; a long, slow period of recovery and liquidation; a rising and falling prosperity, to May, 1884; another panic, not so severe; then stagnation again, a gradually rising prosperity to October, 1890; another sudden precipitation, then stagnation, and finally a sudden start upward to June, 1893; and then a remarkable movement of prices downward, followed by rise of prices from 1896 to 1900.

Causes of Low Prices.

But we have said that prices not only represent the tendency of the business world, but have been in themselves the causes of crises and panics. But what are the causes of low prices? First, since 1873 at least, the causes of low prices have been twofold, namely: the increased facilities for production of certain kinds of goods, and the so-called overproduction of these far beyond what the market would absorb; second, the constant and steady rise in the price of gold,—that which measures the value of all articles. Numerous economic writers have tried to show that the whole difficulty rests upon the fact of improved machinery and new inventions and discoveries, which facilitate the rapid production of certain articles, and the consequent fall of their value. To a large extent this has been true, for indeed we witness in the production of iron in all forms, in the production of copper, in the production of aluminum, a rapid and sudden fall of prices which can be accounted for in no other way than that of improved processes. But when we come to take an average of all prices of all goods, then we see an average fall, and we come to the conclusion that there must be some other

influence at work, which could be only the sudden rise in the value of gold. For, indeed, were things properly adjusted, were everybody's needs supplied, everybody's desire fulfilled, there would be no such thing as overproduction nor a general business failure; for there would be goods to exchange for all goods. Yet the influence of any given industry is far-reaching and wide-extended in relation to other industries, and the failure of one may bring an overstrained condition of affairs and lead to depression in others, which in turn may lead on to panics, and loss of confidence in trade.

Protective Tariff and Panics.

Fundamentally, protective tariffs are not the cause of panics, though they may help to precipitate them. Any sudden tariff changes will in their arbitrary interferences with the laws of trade have a tendency to create an unsettled condition of affairs, lead to trade depression, and, if the market is over-sensitive, to a crisis and panic. The history of our own country shows that this is true. On the other hand, where there have been slow changes in the tariff there has been no real detrimental effect upon business. We find, too, that panics come and go, whether we have high tariff, low tariff, or free trade. The panic of 1857 was caused by over-activity in trade, excessive speculation, over-banking. Immediately, in the same year, a tariff was framed to help avert the threatened panic. But it had a contrary effect; it unsettled rates of goods when prices were already unstable, and intensified the panic by throwing certain industries into confusion. It will be noticed in this that all the conditions of a panic were evi-

dent before the tariff bill was formed; all it did was to intensify the evil, rather than restrict it. Again, the tariff of 1846, which was called a revenue tariff, being a reduction from the old tariff of 1842, brought about various changes. In the attempt of the people to readjust themselves to the changed conditions, the causes of the panic of 1848, which followed, were intensified; but it was of short duration, and the upward movement started again in the following year, 1849. The results of the reduced tariff of 1872, and of the increased tariff of 1883, and of the McKinley bill of 1890, are readily observed. In each case they failed to bring steadiness to the market.

You will observe that the panics occurred immediately after these great changes. The tariff law of 1872 and the panic of 1873, the tariff law of 1883 and the panic of 1884, the McKinley bill and the panic of 1890, and the Wilson bill and the panic of 1893, came together. Now we must not infer, because all these occur together, that they stand in the relation of cause and effect, for frequently the panic has been the cause of the tinkering with the tariff. But the tinkering with the tariff to modify the condition of panics has been generally a detriment to the whole community. Without doubt the McKinley bill induced a great deal of buying from European markets, and overstocked our own, prior to the enforcement of the high tariff on certain lines of goods. These lines of goods became cheap, business dull; and it would not do to infer that this McKinley bill was a fundamental cause, or indeed a cause, of the panic of 1890, although it intensified the depression. It is impossible to deny from any historical standpoint, that the Wilson tariff law had a very potent

influence in intensifying the evil results of the panic of 1893.

History of Panics in the United States.

It will be impossible for me to give a complete history of the panics in the United States, but I will refer rather specifically to our business course since 1873, for it is from this point that the financial troubles of '93-'96 really date. At the close of the civil war we were still in the paper-money era, which had served to greatly inflate local prices. Also, special lines of manufacture had reached a high grade of development, and at the close of the war a large number of men turned their mental and physical energies to the development of the resources of the country. The result was a rapid and somewhat fictitious movement in business; and I may say here, that the difficulty with rapid movements in business is, that the different parts of the business world do not have time to readjust themselves to the new conditions, and the result is weakness and failure on the part of some, which tend in turn to break down others. There was considerable movement, too, in the speculative market. The railroad-building which had begun so vigorously in the latter period of the sixties was continued along into 1873 with great rapidity. In that year 4,190 miles of road were built, at a cost of \$121,000,000; or in the period of 1868 to 1873, railroads were built at a total cost of \$1,700,000,000. This absorbed a vast deal of capital of the country, and led to an overstrained condition of business. A gradual return to specie payments tended to a shrinkage in prices, and there was a decided depression in the money market in November and December of 1872. During this period the lowest rate

of discount was 7 per cent., and in December it was quoted at 1-32 of 1 per cent. to 1-4 of 1 per cent. a day. People entered the new year with a hope of a return of better times; the interest declined a little, to six or seven per cent. Soon the old rate of 1-32 of 1 per cent. a day reappeared, and continued to the month of May. By April the air was full of the symptoms of a panic, which was precipitated by the 15th of April. There was a slight recovery in May, but a severe relapse in September. The demand for money was excessive; it could not be had at any price; some few loans were made on the culminating day at 1 1-2 per cent. a day. In September the panic broke forth under the notorious failure of Jay Cooke. It was a miserable year, during which prices were excessively high in all branches of business. Loans which had been made for completing railroads followed one another so rapidly and created such a demand for money, that from the month of October, 1871, to the month of May, 1873, they could not be placed at a lower rate than seven per cent. interest; and the issue of railroad securities became so unsalable that bankers succumbed beneath the burden. This was a great misfortune to all the railroads. In the commercial world affairs were not so bad as was feared. On the 20th day of September, for the first time, the Stock Exchange of New York city was closed for ten days, during which legal-tender notes were at a premium of 1-4 per cent. to 3 per cent. above certified checks. On the 18th there was a run on the deposits, continuing on the 19th and 20th, especially by the country banks and the bank correspondents. No security could be realized upon,

and in order to relieve the situation the Secretary of the Treasury bought \$13,500,000 of national 5-20 bonds, stating that he could do no more. The banks finally passed their most critical period October 14th, when out of \$32,218,000 legal-tender dollars at the beginning of the panic, only \$5,800,000 remained on hand. It was not until the month of November that the decline stopped, and a slight advance began to take place. Throughout the entire panic, the bank reserves were much below the legal requirements of 25 per cent. The New York Clearing House came forward and issued clearing-house certificates to the amount of \$26,565,000, and made a common fund of legal tenders belonging to the associated banks for mutual aid and protection. It is thought that this measure prevented a great disaster. Discounts, which were \$309,000,000 in September, 1871, had fallen to \$278,000,000 in September, 1873, on the eve of the panic, and they were finally reduced to \$250,000,000. Deposits, which were \$248,000,000 in July, 1871, fell to \$198,000,000 in September, 1873. At the last point of the panic, when suspension was universal, deposits had declined to \$89,000,000. Great speculators, with Vanderbilt at the head, formed a syndicate and made prices to suit themselves; but the death of Mr. Clark, in June, and the failure of George Bird Grinnell, brought about its dissolution, and the liquidation of this great concern kept down prices for a long time. Then followed a long period of gradual recovery of business, and slow liquidation. By 1878, confidence was restored, and in 1879 business was again flourishing. From 1879 to 1884 were five years of great prosperity. The last date terminates the history of the

prosperity period, and marks the beginning of a new crisis.

During this period, the most gigantic speculations in railroads had occurred. The zenith of the movement was in 1880, which was followed by a slight retrograde movement after three years marked by declining prices. The cause was the extensive building of new lines of railroads, the necessity of lowering rates, and the manipulation of railroading by the managers on a great speculative scheme. In May, 1884, the storm burst upon the business world, and several houses went down. Then followed the suspension of banks, beginning with the Marine Bank on May 5th, and the Metropolitan a week later, with a large number of banks and houses of the second order following in its train. The banks and the Clearing House were the first to be attacked, but they formed themselves into a syndicate to resist the storm which was causing failure all around them. Checks were no longer paid, and settlements no longer took place; consequently, credit circulation was suspended. Clearing-House certificates again availed to settle trade balances. In the industrial world we find that 1883 was disturbed by numerous failures. Though there had been no sudden decline in prices, they could scarcely be held in their places, and just before the breaking-out of the panic there was great complaint of the accumulation of goods in the warehouses and the difficulty of making exports. Gold flowed away from the coffers of the country, and cash on hand decreased each day. On the first day of January, 1884, by the order of the court, the New York & New England Railway was placed in the hands of a receiver. The North River Com-

pany followed soon after, on the 12th of January. Many houses exhibited their balance-sheets. On May 6th the National Marine Bank failed, and then the house of Grant & Ward, which went down with a liability of \$17,000,000. On the 13th of May the president of the Second National Bank of New York was forced to suspend payment, with a liability of \$3,000,000. It was the final blow to credit; exchange became impossible. Trade operations were suspended; securities were plenty, but money was lacking. The rate of discounts and loans rose to 4 per cent. a day, in the worst period of the panic. No ready money could be counted on by anyone at any time; offerings were made upon the stock exchange, with no takers at any price; everything was disorder and confusion; houses and banks continued to go down in the midst of a great tumult. It was not until the banks and the Clearing House formed a syndicate that things began to settle down and distrust to diminish. Finally, a rise in the discount rate attracted foreign capital little by little, and exchange grew easier. With the help of the syndicate a good credit was established, and the rate of discount declined to 5 per cent. This panic was general throughout the United States, but it was rather a panic of securities, than an industrial crisis. People had failed to observe the slowly declining prices from 1882 to 1884, and were unprepared for the storm which burst upon them. The panic in Europe in 1882 had checked the rise of prices and started their decline, so that the storm was really gathered two years before it burst. One of the fundamental causes of the precipitation of this panic was, that the banks had made immense loans on the shares of

the new railroad issues, in order to advance the prices on the stock exchange. Just at this juncture, the railroad earnings, instead of increasing, showed a weakness and suffered a slight reaction; and as soon as these artificially maintained quotations began to drop a little, everything became unsalable and the whole edifice crumbled. Up to this time excitement had prevailed, and the rising in prices had caused every one to buy. The moment the advance was arrested, everybody reversed his determination, and wanted to sell. Bankers had invested not only their capital, but some of their clients' deposits; and all the brokers were interested in the speculation which brought them business and kept things booming until the collapse came and business ruin followed. But low prices, and the outlook for a fine harvest, gave courage; confidence began to be restored, and a resumption of business followed. It was not long before the normal state of business returned.

Business continued to advance until 1888. This was a prosperous year, although securities became heavy and a general depression in business followed, and some stocks shrank immediately. There came however a sharp speculation in wheat; copper had declined to a large extent; and the French copper syndicate, holding up the prices for a time, finally collapsed, and caused a certain fluctuation in business. Crops were large, with the exception of wheat; the cotton manufacturing was extensive. There was a slight decline in the pig-iron production; decline in the production of petroleum, by agreement; and a heavy one in Bessemer iron. There was a large export movement in 1889 in cotton, the greatest since 1880. The new tariff,

which came into operation in 1890, introduced a large import of goods. The volume of business in 1889 was the greatest ever known in the history of the country. Railroad earnings showed a wonderful recovery, and many reports gave the largest figures ever recorded in this business. There was plenty of work; good wages, fair prices. Nevertheless, there were indications of a coming depression. In the middle West the farm-mortgage pressure was excessive. There was a decline in the anthracite-coal production; there were low prices for corn and oats; speculations, too, were growing smaller. The bank reserves were getting low towards the last part of the year, and there was a heavy absorption of investment securities; a large amount of gold—more than \$37,000,000—was exported in the first six months of the year; failures were becoming numerous, exceeding those of 1888 by 203; there was a bad decline in the woolen trade; the importations surpassed all previous years, and the net export of gold amounted to nearly \$40,000,000. Unused deposits, capital surplus and undivided profits were getting very small in the banks in comparison with the large number of loans and discounts shown at the end of the year. A close work in banking began, while the demand in the South and West for currency was very great. It was in this condition that the year 1890 opened, with a constant pressure for bank accommodations. There was an excessive volume of transactions of all kinds, but there was not enough money to keep up with the overtrading. The Secretary of the Treasury threw a million dollars a day into the market for a period of seventy days, for the purchase of government bonds. The railroad magnates met and tried to sustain the price of railroad securi-

ties against an oversupply of them. These two movements only delayed the coming crisis. The debates on the silver question led to false hopes of cheap money, and made a delusive shrinkage on account of the promise of high prices, and led to speculation. The Buenos Ayres crisis created a great demand for money in England, and England sold her securities in our market, taking gold therefor. Although we had a large cotton crop, the oats, wheat and corn crops were small. Failures began to appear in New York, and the embarrassment of the Baring Bros. in England intensified the panicky condition of affairs. Railroad-building had increased to a large extent, 6,081 miles being laid in this year, and the new securities were barely absorbed. This had a tendency to depress the market. The huge imports to take advantage of old tariff rates absorbed a vast deal of money. The silver bill created some distrust abroad, which made a decline of \$123,000,000 in circulation and in specie reserve of \$178,000,000. Discounts and loans rose to \$1,932,000,000. The panic was of short duration, and the following year liquidation and recovery took place, confidence was restored, prices began to advance, and there was a feeling of general prosperity.

In 1892 we had a fair business year, and the year 1893 began favorably. But, in the midst of the apparently favorable condition of affairs, a sudden panic burst upon the people. The great cause of this panic of 1893 arose from the fact that there was an imperfect liquidation after the panic of 1890,—for there is no sure return to business prosperity until liquidation takes place. It was not thorough in its process, consequently a relapse took place, and

the relapse proved worse than the original disease. The movement was precipitated before its natural time, on account of the influence of Argentine and the Barings; but it was arrested on account of other influences, such as large crops and favorable condition of manufactures. It was again suddenly precipitated on account of the scarcity of money, excessive rise in gold, and the continual fall in prices. The suspension of free coinage in India intensified the importance of our own silver question in America, as did the unrest and discontent engendered by the threatened sudden and radical change in the McKinley tariff law. In all this must not be ignored the fact that in certain industries there was a stimulation of production clear beyond the ability of the other portions of the world to absorb.

Management and Prevention of Panics.

Enough has been said to show the nature of panics, and to reveal their causes. Is it possible to remedy them when they are once upon us? The Bank of England has a way of discouraging excessive borrowing, by raising the rate of discount. In the United States we have no such plan, except as it occurs through natural laws. If the Bank of England fails to discourage excessive extension of credit, it simply by permission issues a large amount beyond the bullion reserve; that is, notes are issued on other securities. This gives the bank reserves or supplies the outside demand. There are only two ways to make a panic subside: one is to lessen the demand for credit, the other to increase its supply. Both should be tried in every way. We have seen that the New York banks combine their reserves and issue clearing-house certificates,

so that they stand together. The government has frequently relieved the pressure by the purchase of government bonds. If all banks would pay out as fast as possible they would be able to turn the tide of a panic, provided that they were all united in one system.

But the prevention of the occurrence of panics and industrial crises is a much more difficult matter. If we should agree with the theory of Mr. Jevons, that they are caused by the sun-spots, then how shall we regulate the sun? Or if we conclude that they have deep-seated causes resting in the nature of modern organized society, how shall we change the organization of society? Crises have been classified as credit panics, capital panics, and panics of circulation. If the credit system is responsible for these business diseases, how shall the credit system be improved? Delicate and sensitive as it may be, I am convinced that improvements might be made in our credit system so that it may be more stable and uniform and be open to fewer irregularities. Our banking systems are far from being perfect. They may be greatly improved. In case of a defective circulation, it is believed that the nations of the world could make a currency which would be more stable and cause less fluctuation in the market, and in most cases the circulating medium of most governments could be greatly improved. As to the great lack of capital causing panics and depression, there seems to be no real remedy for that except in a decline of the speculative spirit. A slight remodeling of human nature—who will undertake the task, so that there will be less capital destroyed in speculative enterprises induced by people who have great hope of sudden wealth? Millions

are sunk every year that yield no return. If we do not want sudden downfalls, we must be contented with a slower pace, with smaller margins and less business, on a surer foundation. But if we consider industrial crises in the scientific sense, we enter a still more difficult field. The foundation of specialized or capitalistic production is touched in the consideration of the causes or the prevention of these recurring industrial phenomena. Mr. Giffen asks the question, "Why is trade depressed?" Should not the question rather be, "Why is trade ever prosperous? To keep in full employment the complicated machinery of a highly complicated industrial community like that of England; to have matters so ordered that at a given time there is an excessive demand for labor and capital in all branches of industry, and hardly any individual willing to work, in fact goes without employment; and to have all of this accomplished by voluntary association and competition among the units with which society is composed, each pursuing his own interest, and laboring to produce what he believes other people will buy, is surely a miracle so astounding as to excite perpetual surprise that it should be performed." He says that "the marvel is not at all diminished by the fact that under no other conceivable system, socialistic or other, could the same results be achieved." In a less complicated system a depression in business is no marvel. Take an agricultural community, and one single failure in crops is sufficient to produce depression, and in olden times a famine. About forty-eight years ago Ireland had a bad harvest, which produced a famine of the old style. But when society is wholly tied together through a varied and

complicated industry, a bad harvest, though less radical in its results, has its effects all along the line of competitive industry. And the slightest decline from the maximum price sets up an outcry about depression. It has been stated with some truth, that it frequently occurs that when people complain the most, times are really the best when considering the ultimate good to society. Grinding economy, shortened income, loss of property and failure may not be comfortable things to think of in a personal way, but society at large is learning the rough lessons of experience.

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CHAPTER VIII.

SPECULATION.

Compensation for Risk.

Every business enterprise involving capital, labor or land is accompanied with more or less risk. The modern system, by which the estimated wants of a community are determined by business managers, in itself involves risk. There is an estimate of the kind, quality and amount of goods demanded by the people. If the manufacturer fails in his estimate, and produces a kind of goods which has been superseded by something else or has been superseded by goods of a different quality, his goods fall upon the market untouched, and there will be an insufficient amount of returns to the business to pay the interest on capital and the wages of labor, and he will get nothing for his risk. Also, if a manufacturer overestimates the market and creates more goods than are readily absorbed, he may for a time feel the depression; and if those goods are in turn superseded, the market will not be able to absorb the entire stock.

It is sometimes said that even the farmer takes a risk when he tills the soil, for he must be dependent upon the climate for his success in the enterprise. It is true of every legitimate business involving the various factors of production. But more especially is this observable in trade, for the tradesman must make a careful estimate of the needs of the community, and also of the amount

of each kind of goods that it is likely to absorb within a given time. If he fail in this estimate the tradesman will find it difficult to satisfy the demands of his own business, and consequently will not have sufficient income to pay interest, rent, labor, etc. This principle explains very clearly why it is that the profits of both the manufacturer and tradesman appear to be so high: it is a reward for risk, and, owing to this, the nominal profits must be estimated very high.

Now there are two reasons why so many failures occur in business along this line: first, because business managers are not capable of estimating the market; and, second, they are unable to realize high enough profits to cover this element of risk,—therefore the weak members of the so-called business fraternity fail while the stronger survive. It might be said incidentally, that this is one reason for the great concentration of wealth under our present system. People see in it the avarice and greed of certain individuals who seek to destroy others in business. In the open market it is to a large extent the survival of the fittest; and as the number of the unfit to do business is very large, it is quite in keeping with the speculative system that thousands should fail in their enterprises. It will be found, also, that those persons who do succeed are those who are willing to sacrifice their own comforts in life by saving to gratify their ambition. It is ambition for wealth and power that really makes a very strong element in the creation of their fortunes; and this, coupled with the idea of business capacity on the one hand and the large compensation necessary to be set

aside for risk on the other, makes this inequality of wealth in the community. If it is necessary to have a large compensation for risk and a certain man succeeds, then his wealth accumulates rapidly; and if he succeeds once where others fail, his opportunities for success are multiplied.

It is idle to argue that because all business is accompanied by risk, all speculative enterprises are legitimate, for if too much risk is taken we find a tendency to create fictitious values; so that when speculation is carried to an excessive extent it becomes nothing more than a kind of gambling. Now the difference between gambling and real business is not easy to determine.

Legitimate and Illegitimate Speculation.

It is difficult to say where speculation passes into gambling, for the reason that a line cannot be drawn determining how much risk should be taken in business. There is, however, a clearly marked species of speculation which can be classified as gambling. Gambling is in itself a process of distribution; it is an economic category of fortune. Two men sit down at a table before a pile of gold. By the manipulation of cards with skill or trickery or fraud, one obtains the gold and the other loses it. All that trade which tries to get a share of the product of industry without rendering any definite service to human society may be called illegitimate speculation, and is analogous to gambling. Where people attempt to manipulate the market by forcing prices up or forcing them down, where they attempt to make "corners" in the market or by monopoly power seize excessive margins,

it is nothing more than the exploitation of humanity, forcing it to contribute to a superior skill in distribution.

Why Gambling is Detrimental.

The chief objection to gambling is not an economical but a moral consideration, for from a directly economic standpoint the detriment to economic society is not great. Inasmuch as it encourages idleness and vice and destroys a large proportion of the productive power of the community, its economic influence is bad. Even the moral influence caused by the attempt to get something for nothing leads to a breaking-down of the economic system. In so far as gambling interferes with legitimate trade, it creates an uncertainty to economic life. But if a group of men on Wall Street struggle with one another for certain margins in the buying and selling of stocks,—if some gain and others lose, the business world is not greatly influenced thereby, any more than when a large number of men play poker in which some gain and others lose. The difference is plainly that in gambling no service is rendered to the community, while in legitimate business, though some gain and others lose, the losses are even more disastrous than the losses of gamblers; but still, by the process of legitimate trade or manufacture, some service is rendered to the community, even though certain individuals lose.

The moral effects of gambling are far-reaching. The development of that idea of expectancy destroys the normal condition of the individual. It is far different from that hope of reward founded on service to the community. But speculative trade may be serviceable. If people buy

grain at a low price with the hope of selling at a high one, they are anticipating the wants of the people and intending to supply them. If individuals buy lands to hold until there is a rise in value, it is also along the legitimate process of trade; in fact, they are bought and sold with the idea of a margin of profit. If large quantities of mining stock are bought with the expectation of a rise in value without actual development of the mining property, the rise must be determined by some fictitious manipulation in the market, and this speculation must be disastrous.

But this buying and selling of goods on the market and satisfying future delivery has a tendency to make the market stable, and thus renders a great service. Suppose one man should anticipate a large shortage in wheat and he should buy a large amount of wheat, hoping to hold it till that time. No one else discovering this, he would buy at a very low price, and when the shortage came he would sell at a very high price. But the tendency is for all business men to observe the same causes and effects in business; and instead of one man, suppose a thousand men anticipate this shortage in wheat and attempt to buy the surplus. Two things will happen: first, in any purchase of wheat there will be competition of buyers, and the present price will rise; second, when delivery-time comes there will be competition in selling, and prices will tend to fall. In other words, there is a stability of values fixed in this delivery of future goods. This very fact that the brightest business men of the country estimate the amount of available goods at present and in the future, and the

extent of the normal demand at present and in the future, tends to regulate prices, and that estimated price regulates to a large extent the amount of production. Hence it is that the laws of supply and demand are carefully estimated, and stability given to production and distribution, and consequently to prices.

Trade in "Futures."

The trade in "futures," that people talk so much about, is, when carried on properly, a blessing to both the producer and the consumer. Formerly, people in trade made their margins largely on account of the difficulties of transportation on the one hand and the lack of information on the other. Great caravans started across the continent, involving a great risk in reaching their destination. When they did succeed, goods were sold at enormous profits. The ancient merchant ships that plowed the waves under great difficulties and dangers, running great risk from freebooters, pirates, storms and stress of sea, finally obtained enormous prices for goods; but cheap transportation has destroyed all this. A large amount of goods can now be readily thrown from one part of the country to the other, or from continent to continent, with little expense. Quick communication by telegraph accompanying cheap transportation enables merchants to estimate prices in London and New York, so that people will not pay high prices through ignorance of the market value of goods. The result is, that a stability of value is fixed the world over, varying only on account of the cost of transportation; and margins in business in both manufacturing and trading grow smaller each year, and more stable.

These margins are reduced largely to the actual service rendered humanity in the production and exchange of goods.

The evil results of this exchange in futures are found largely where people trade without any intention of delivering the goods, hence without any intention of rendering any direct service. It has developed two groups of traders, known in the market as "bulls" and "bears." The former hope by excessive buying to create a demand for goods and thus increase the price. While the regular investor buys with the expectation that the property will become more productive, the bull buys with the expectation of forcing prices higher, or that by means of certain financial organizations values may be enhanced. The bears, on the other hand, seek to depress prices by organized speculation. They sell for future delivery without owning or even possessing, at the time of the sale, the goods which they sell. This trading leads to an attempt to corner the market for illegitimate gains. People simply pay the cash balances without any intention of handling the goods. There can be no gain in turning goods over and over in the market before the delivery, that certain bulls, by advancing prices, may make a margin, or certain bears, by depressing it, can ultimately realize a margin.

The illegitimate form of trading called "cornering the market" is nothing but a trick of the gambling process. By it buyers seek to obtain control of the entire market and force prices higher after obtaining control, hence those persons who have to deliver goods are short in their delivery and in danger of ruin. Large numbers having

agreed to deliver goods on a margin are thus unable to make their purchases, and are consequently short on delivery. The result is, that many are forced to go out of business. It also has the bad effect of raising the prices to consumers, and frequently causing great distress; for such gambling is applied to the necessities of life, such as coal, wood, corn, wheat, petroleum, etc.

Speculation in Productive Industry.

In the world of production there is a vast deal of speculation. Companies are formed for the manufacturing of certain lines of goods, for the exploitation of mines, for the building of railroads and other means of transportation. No one can tell just what will be the result of any enterprise of this kind, and people put their money into such concerns with a good deal of risk. The speculative element enters largely into mining, and into some manufactures. The essential business principle to be observed is always to reduce this risk to a minimum. Here, as elsewhere, the greater the prospect of large gains the greater the risk that will be taken. There are now passing up and down the country men called promoters, who persuade capitalists and business men to go into certain enterprises with a prospect of large gains. This is a peculiar form of speculation, and the last great result of this kind of speculation is found in the modern trust and the purchase and sale of certain forms of stock. As the trust is discussed in another place in this work, it is not necessary to elaborate this form of speculation. It will suffice to say, that this is a special organization of productive forces with the hope of great gain, and involves to a large

extent the principle of monopoly. Many of these speculative organizations will fail because of the overestimated power of earning pictured to the investors by the promoters. The speculative market will be infested with this species of stock, which will fail to yield a return to the investors, and sooner or later there will be a collapse in the business. Over-organization industrially has a tendency to destroy some forms of manufacturing, but it has, as in trading, a tendency to create stable values for manufactured articles because it more clearly estimates the wants of the people and can more exactly supply them.

Moral and Economic Effects.

The moral and economic effects here are the same as in trade. Wherever the risk is taken ordinarily for the purpose of supplying the legitimate demands of the industrial world, industrial speculation is legitimate. Wherever it exceeds this for the purpose of creating goods which may not be demanded, it has gone into exploitation of the property already existing, and is simply a new process of distribution. The economic effect of the former is to give stability to wholesale prices and to more carefully estimate the demands of the people. It will also be a means of progressive development in manufacturing. The speculative enterprise trying this form of manufacture, then, making a careful study of what goods will satisfy human desire and seeking at all times to reach a more perfect satisfaction of the wants of the individuals, will tend to develop more rapidly the industrial pursuits and to encourage industrial progress.

Insurance.

The question of insurance for risk is very important. Every business man must set aside enough surplus to insure against bad years or bad ventures in either trade or production. Companies are formed for insurance against losses. This has nothing to do with gambling, or illegitimate speculation of any kind. It is merely a legitimate business insurance against risk. It becomes a source of security to business men, and tends to create industry, permanency, and efficiency. Insurance thus renders a public service, while the lottery, the pool, the policy-shop or the bookmaking enterprise is an attempt to obtain gains through the process of illegitimate speculation.

Remedies.

It is easy to make laws against gambling of all forms, but difficult to enforce them. It is quite easy to define certain forms of gambling, and thus to determine whether persons are violating the laws, but to apprehend and convict the same, meting out to them the penalty of the law, is more difficult. But it is very difficult to distinguish between legitimate and illegitimate speculation; hence it is difficult to establish a law which will properly regulate it. Therefore all legislation against the speculative market is liable to prove disastrous, for it may interfere with that legitimate trade in securities or produce which has rendered stability to the market. The only hope is to educate the business sense which will guard alike against illegitimate speculation in trade or industry, and will cause people to enter only those enterprises which are rendering a distinct service to humanity in production or transporta-

tion or exchange, and for which an ordinary and legitimate return may be expected. But society may be protected by certain laws which shall insist that neither individual nor corporation nor trust shall exploit humanity by a process of refined robbery, but that the business enterprise shall seek to develop the resources of the country, to manufacture necessary goods, or to engage in legitimate trade, or to perform such services of transportation and other enterprises as shall yield a definite benefit to human society. This may be done by educating the business sense of the community, and by creating certain restrictive laws which shall be regulative, preventive, and educative in their nature.

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CHAPTER IX.

TRANSPORTATION.

Effects of Transportation.

While the great original sources of wealth are found in the resources of nature and in the application of labor to raw material, the means of transportation affect values in exchange quite as much as the cost of production itself, for the means of supplying the demand in the market frequently determine the price of goods. As society becomes more complex we depend more and more upon the facility with which the goods are brought to the market; or by which we may be carried to the goods. In former times, when people wanted anything they went where it was; now, they bring it to them or go to it as they please.

Wealth is greatly enhanced by transportation. The gold in the heart of the mountains is of no practical value until it is brought to the light and carried to a place of use. The expenses of transportation must in general be added to the original price of the goods. Kansas corn, having supplied the home needs, is of little value until transported to a place of use. Should transportation suddenly be stopped a month in some localities, commodities would reach fabulous prices, while in others they would command no value at all. Thus in modern life are we dependent upon transportation for both necessities and luxuries of life.

The facilities for transportation tend to increase the

division of labor. Living alone, man must produce alone food, clothing, and all articles of use and luxury; while by means of transportation he may apply his whole time to one thing and receive the benefits of the combined labor of the world. The poorest workman in one of our cities lives on the products of the world. It takes the products of both hemispheres to supply his needs. The wool that makes his coat comes from one place, the coat from another; the leather that makes his boots from one section, and the manufactured articles from another. His tea is from China, his coffee from Brazil, and so for everything he uses. Hides are shipped from Kansas City to New York and from New York to North Carolina to be tanned, then back again to New York or Boston to be made into boots or shoes, which are again reshipped to Kansas City to be consumed by wear. By this double transportation and repeated combinations of labor the price of the manufactured article is greatly increased above the cost of the raw material.

Prices Equalized.

Rapid transportation of goods tends to equalize prices, while, as was stated above, the price of the goods in the market is regulated by the relation of the supply to the demand. With our facilities for exchange and transportation the price of staple articles always tends to reach the cost of production. The prices of dry goods in Eastern and Western cities tend to be the same as transportation is cheapened. So, likewise, the prices of Western products will be less in the markets of the East as transportation is quickened and cheapened.

What advantages are there, then, in cheapening transportation? First, any increased demand for goods will give the seller the advantage and not the transporter; and secondly, goods received in exchange can be laid at your door at less expense. This is the same as receiving a higher price for the articles sold in exchange.

Equalizing Industry.

One of the greatest effects of cheap transportation is the opening up of new lands and the extension of agriculture. The rapid development of the Mississippi Valley and the far West could have been made possible only by the magnificent system of railroads which brought homeseekers to the uncultivated fertile lands. This process of agricultural extension has without doubt been carried on too rapidly to be conducive to the highest development of agricultural production. The opposite is also true, that a system of cheap transportation tends to concentrate manufactures in cities and in the most favorable localities. Truly, it has often been said, the railroad is a city-builder or a city-destroyer, as the case may be. The effect of rapid transit on population is especially observable in our modern cities, where the residence portion of the city is widely scattered for miles from the center of business. On the other hand, in the business portion of the city population becomes compact or concentrated.

Economic Value of Cheap Transportation.

All of the foregoing propositions tend to show us what a great wealth-producer commerce is, and how rapid and cheap transportation affects every department of economic life. Consider the limitations that would be set upon a

country isolated from other countries in modern economic life, and it will be seen that the value of cheap transportation cannot be overestimated. In looking back at the development of the West, because of the railroads which opened and developed its fertile valleys and its mines, the power of transportation is readily seen; but the question is as important to-day as ever. We are still seeking the cheapest transportation possible for the goods we have to sell, and also for those we must import from other places.

Those countries which are fortunate enough to have water-ways find thereby a great saving in transportation. By this means heavy freight, such as stone, iron, and grain, can readily and cheaply be moved, while lighter articles of freight can be left for railroad transportation.

Advantages of Water Transportation.

In all cases where heavy freight is to be moved and rapid transit is not absolutely demanded, water communication is much cheaper and better than railway. No mechanical constructions have yet been invented which can compete in the matter of cheapness with transportation over or through deep waters of lake or ocean. The friction caused on a dry road-bed cannot compete with it in respect to expense, and the deeper the water the cheaper the transit, other things being equal.

Thus, freight can be carried on the ocean by means of twenty-five feet draught at the rate of one-half of one mill per ton per mile; while in the great lakes, with from fourteen to sixteen feet draught, the cost is one and one-half mills per ton per mile. If we consider the Erie canal as the best example of canals in America, the

freight will cost about three mills per ton per mile. Professor Haupt, of the University of Pennsylvania, has stated the cost of water transportation in the form of a practical law: that "the cost of movement in water varies inversely as the draught of the vessel." In 1884 the rates by rail from Chicago to New York were 30 cents per hundred pounds; from New York to Liverpool, 10.5 cents additional. The average rate of grain on the railroad in 1885 from Chicago to New York was 14 cents. By lake and canal route it was 4.55 cents. Many more examples might be given of the cheapness of water communication. The Erie canal has had a great influence in cheapening rates of transportation from the Northwest to New York. All of the competing lines of railroad have been obliged to reduce their freight rates. The lake-and-canal route has had a direct influence on all roads parallel, and an indirect influence on the entire traffic of the North and West. If it is true that water communication is so valuable, why has it been neglected?

Water Transportation Neglected.

The reason that water transportation has been neglected in the United States is on account of the railroad. The railroad came into use just as we were attempting a system of water-ways to penetrate the nation. Not very much had been done at that time. The canals were but little more than ditches; the rivers had not been prepared for deep-water boats; and the lakes had not been fully utilized. The result was, that when the railroad was built, with such rapid transit everything ran quickly to railway traffic and the water-ways were neglected. The

surplus capital of the country went to building railroads, and the government did not feel the need of spending money for the encouragement of means of water transportation. As a result, the water-ways that had already been constructed were allowed to decay. Wherever competing lines of canals existed the railroads bought up the canals and destroyed their effective work in a reduction of the rates, or else destroyed the canal altogether. The course pursued by the railroads has helped to destroy the canals. Wherever the water-ways have been maintained, they have been compelled to compete with the gradually decreasing rates of the railroads, and have thus helped to regulate freight fares after the manner of competition. There is a feeling that even the railroads have made a mistake in this matter, for the roads that have run alongside of competing water-ways have been helped rather than hindered by the water transportation. Should the Nicaragua canal be built, it will, in the end, increase the volume and the income of the transcontinental traffic. It is a mistake to suppose that a competing water-way will in the long run hurt a railroad. It simply carries the heavier freight at so much cheaper rates that industries are stimulated, commerce is increased, and the rates reduced.

Railroad Problems.

There are many problems relating to railroads in the United States. The policy of our nation has been, first, to encourage railroads by granting them lands and subsidies and giving them liberal charters. This has been followed by the period of intense competition on the part of the railroad, ending in war and combination. Then there

followed on the part of the states an attempt to regulate rates through constitutions, legislative enactments, and railroad commissions. Much of this contention between the people and the railroad has been shortsighted on the part of both, for they have common interests. If the railroad works to develop the country, it will reap its own reward. On the contrary, if the people work to develop the railroad, their country and community will be improved.

Abuses of Railroad Management.

Many questions have arisen concerning the abuses of railroad management. In some countries the states own and manage their own roads. But in the United States we have always had private management; therefore, until government ownership obtain, there is no other way of regulating roads but through government restriction and control. The chief cause for complaint in America has been that freight and fares are too high, and that railroads discriminate against persons and places in violation of their own rules. While many abuses have crept in with regard to excessive rates and discrimination, it should be said that railroad rates have greatly decreased in the United States since 1880, and in most instances have decreased in a greater ratio than the cost of transportation has decreased. It should be said that railroads represent a system of expensive transportation, and the extent of improvements necessary to keep up with competition only adds to the extra expense of railroad freights.

There has been much complaint against pooling. The railroads have claimed to be ruined by competition, and have resorted to combination. As given by Mr. Hadley,

this usually takes one of four forms : First, agreement to maintain rates ; second, agreement to divide the field ; third, agreement to divide the traffic ; and fourth, agreement to divide the earnings.

The last three methods are known as pooling. Pooling has its own dangers and its own benefits. Where excessive competition reduces the rates below cost, they must be made up sooner or later. This forces railroads to combine. The unsteadiness of rates is detrimental to both shippers and carriers. Therefore, so far as pooling gives steadiness to business and adherence to a schedule of rates, it is an advantage to railroads and the public. Though it is sometimes taken advantage of by roads when excessive power is had in competition, this is quite unusual, for a good pooling system maintains a better freight rate than does excessive competition.

Another grievance, probably, against the railroads, is the manner in which their stock has been capitalized. In the early railroad-building much abuse was evident by the improper bonding of railroads beyond their actual value and the issue of stock beyond a normal amount, thus turning out a representation of more property than actually existed. This led to a partial deception, and entailed great losses upon persons who had invested in railroad securities. The railroads were forced into a position where they must raise interest on excessive bonds and stocks.

Another grievance, probably, has been that of issuing passes. This was begun in a mild way by railroads to their employés and their families and various important personages, and especially to people doing business with

their respective lines. But the abuse continued until passes were given to any person whose good-will was important to the corporation. Thus legislatures, railroad commissions, newspaper men, proprietors of summer hotels, and agents of companies doing business for the railroads, were all given passes. While it was first at the option of the railroads, it has become now apparently a virtual necessity, for the public "hold up" the railroads and demand passes of them. At first, the people fought the pass system bitterly. Now, the railroads are more eager than the people to get rid of the nefarious system. It is bad for both the railroad and public, for it leads to distrust in both cases.

The competition of railroad corporations with each other for the business in a given territory has given rise to the practice of rebates to large or favored shippers, causing great distrust of the railroads. This practice has made it possible for the large business to develop at the expense of the small one. It is generally conceded that railways which receive their first right to existence from the state, and which have been declared common carriers by the courts, should not discriminate against individuals or towns by carrying goods cheaper for one than for another. It is one of the chief causes of the development of the trust, an institution obnoxious to the public. The rate bill passed by Congress in 1906 has for its purpose the correction of this evil. If it can be corrected, it will result in great advantage to both shippers and railways. It remains to be seen whether a commission at Washington will be able to fix rates on over two hundred thousand miles of railway, existing under a great variety of conditions.

Railroad Rates.

It is a good principle that transportation should be rendered nearly at cost, so that no monopoly tariffs should accrue to the managers. When interest on capital, wages of labor, and compensation for managing ability, with all expenses, are paid, transportation should have little left. For the system should conduce to the greatest public prosperity. This means that there should be a rational system of freights and fares; rates should be reasonable. The railroads think this means reasonable to them; the shippers think it means reasonable to them; whereas it means, when properly analyzed, reasonable to both. It is right that railroads should receive fair compensation for the carrying of freight; it is also reasonable that shippers should have their freight carried at prices commensurate with the business they are doing. This problem of transportation is a very great one. Where population is dense and business is almost unlimited, railroads can very readily reduce their prices to the advantage of themselves as well as the people. But in the sparsely settled community, where there is a wide extension of territory and a limited amount of business, railroading must of necessity be expensive, and railroads govern their freights and fares accordingly.

The attempt to fix maximum rates has been nearly a failure. There is no reason why the government should not fix such a rate. The railroad is a common carrier, and to a certain extent a servant of the people. Touching nearly every interest in the community, it has no right to create extortionate rates to the interference of that business. But the advisability of establishing such a rate is

doubtful. If fixed too high, then, as in the case of England, it becomes inoperative. If fixed too low, then it can be shown in the courts that it amounts to a confiscation of property, and becomes again inoperative. But a legislature might in one year fix a maximum rate which would yield a satisfactory income to the railroads, while in the following year, owing to a depression in business, it would be too low. The railroads, taking redress in the courts, would have the law declared unconstitutional. The practice of charging "all the traffic will bear" is a good one if honestly administered by the railroads. It is often true that railroads, with all their sharpness of business, are not keen in discovering their ultimate interests, in their anxiety to subserve immediate interests. A railroad that defrauds the people tends ultimately to destroy property and business and to injure its own prosperity. On the other hand, the people who seek to oppress the railroads, because, as they say, they are soulless corporations, may so cripple the railroads that it would cripple the business of the country, lower the assessed valuation of railroads, and throw the burden of taxation upon the people. Thus we return to the proposition that their interests are common, and that there must be wise legislation, if any at all, if the interests of the people would be subserved.

Railroad Commissions.

The modern system of management of railroads in the United States is that of commissions. These commissions have been established in over one-half of the States in the Union. There are two grades of commissions: those with power to act, and those with only advisory powers.

These two types of commissions have been copied throughout the United States by various States. Kansas, in a recent law, created a Court of Visitation with power to act. This brought every question in controversy at once into the courts; but in seeking to give power to the commission, it created an independent court, and therefore was declared unconstitutional.

The Interstate Commerce Commission of the United States has done a vast deal to unify the system of railroad traffic throughout the United States and establish a uniform system of bookkeeping and reports. Thirty years ago there was scarcely a publication of any value on railroads in the United States; now there are very many publications, both reports and well-written treatises on railroads. This has brought the people to an understanding, in part, of the railroads, and has established to a certain extent the idea that the railroads are responsible to the public for their actions.

Abuses of Monopoly Profits.

Railroads are frequently shortsighted enough to forget the principles of monopoly profits. Wherever they can extend the traffic to such an extent as to get a larger net return with a reduction of prices, they should do so. A very good illustration of this occurred some years ago in Austria-Hungary, where by a system of zone tariffs the tariffs were reduced from 20 to 80 per cent. The result was a vast increase of the traffic, and the railroads made more out of the increase than they had made before. But in this case the fares before reduction were so high as almost to prohibit traffic. Wherever there is sufficient

population, a reduction in rates will almost always increase revenue sufficiently to meet extra expenses; and to double the traffic does not anywhere nearly double the expense. The railroads that seek to make a return in services to the public by putting expenses down will gain more rapidly than the railroad that seeks to make a large gain by putting prices up. The railroads that realize that they are public servants, and seek to serve well, will in the long run, with a rationally conducted business, reap the largest reward.

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CHAPTER X.

THE COMMERCE OF NATIONS.

The Advantages of Commerce.

The gain resulting from trade between nations is of the same nature as that between individuals: it is relative rather than absolute. The exchange of the "relatively superfluous for the relatively necessary" brings an advantage to both parties making the exchange, although the advantages accruing to each may not be equal, because of the unequal skill of traders. However, among civilized nations where there is free competition and cheap transportation, the advantages accruing to different nations trading, in the long run, balance each other. Yet there are instances of unequal gains between isolated communities. Thus, the fur traders of America frequently obtained furs from Indians by exchanging articles worth one-tenth of their value. The desire of the Indian may have been satisfied with what he obtained; but it still remains true that in this sharp bargaining the person who obtained the valuable articles became rich clear beyond the condition of the Indian with whom he traded. The same principle is observed among the ancient civilized nations in their trade with isolated communities of less culture and advancement. In such instances immense wealth was gained by the skillful trader. Even in modern times the ships that brought goods to California and other isolated ports of the New

World charged fabulous prices for their goods. While they may have satisfied the desires of the people, they accumulated wealth at the expense of the necessities or fancies of those with whom they traded.

In recent trade among modern nations the same principle is to be observed. While the advantages will balance each other if conditions are equalized, one nation may have the advantage of another in the large amount of raw material at hand or in its cheap processes of manufacture; also, it may have a superior advantage in rightly adjusted protective tariffs and skill in competing in the market. Again, it may have a large advantage if it has nearly all the carrying trade, as in the case of England in comparison with the United States. In all legitimate processes of commerce all persons engaged in it should be benefited, and in the long run all of these benefits will tend to be equalized.*

Trade Among Primitive Peoples.

Commerce in its formal meaning could not be said to have existed among the natural races nor, indeed, among those of barbarous character. Among these people each tribe was self-sufficient; it produced what it consumed. Many of the tribes engaged in barter of certain articles and in war plundered the goods of one another, but it was not until the division of labor and the development of systematic manufacturing that anything worthy the name of commerce existed. At first this trade of primitive peoples was merely incidental to their meeting, but subsequently traders sprang up who went from tribe to tribe carrying various wares. Intertribal trade was, at

* See Chapter VI., Book III., Economics.

first, a rude species of barter, in which the value of the article had but little weight. It was a method of "swapping" to promote good will or to please the fancy. Subsequently it became a method of satisfying the needs of the tribes, which could not be done with home production. Among the primitive tribes of America, Indian traders existed who carried trinkets and ornaments from tribe to tribe. In India, where all ancient customs seem to have crystallized, the single trader continued down to recent times. Among barbarous peoples, trade was carried on overland with great caravans.

Commerce of Ancient Nations.

After national life had been well begun, a system of commerce between ancient nations sprang up, and the earliest records of China, India, Russia, Assyria, Ethiopia, and Phœnicia are of wealthy nations engaged in extensive commerce. This brought into existence a distinct class of merchants, or traders. The methods of transportation of ancient nations varied according to their geographical conditions and the degree of their economic development. First, there were the great caravans of the desert, in which the carrying power was the camel or, as in India, the elephant. In western Asia the caravans were chiefly conducted by Arab traders, which traveled overland between the great cities of Egypt, Assyria, Persia, and Palestine. Subsequently river traffic developed, but it was national rather than international commerce. The Ganges and the Indus, the Tigris and the Euphrates, the Nile, and in modern times the Danube, the Elbe, and the Po were means of traffic between different cities and countries. Later, as boatmen became more venturesome,

the inland seas became highways of commerce, and early traders ventured on the Persian Gulf, the Black, Mediterranean, Caspian, and Ægean seas.

The Phœnicians were Masters of Commerce.

The only people of antiquity that could aspire to claims of commercial greatness were the Phœnicians, who were the first to become really masters of traffic on inland seas. The great and wealthy cities of Tyre and Sidon, situated on the east shore of the Mediterranean Sea, became the centers of an extensive commerce. From these points the Phœnicians trafficked with Egypt, Assyria, India, and subsequently with Greece, Rome, Spain, and Britain, and became familiar with all the coasts and ports of the Mediterranean. Abandoning the prevalent system of obtaining wealth by conquest and plunder, these people gained their wealth and independence through industry and commerce. The secret of their power seems to have been an inordinate desire for gain, skill in ship-building, the manufacture of certain articles not found in other nations, and the adventurous disposition of their seamen. The advantage of having the carrying trade for the world was a source of enormous wealth, and the cities became rich and populous. For the five or six hundred years that the Phœnicians ruled the seas, they planted colonies in Greece, Italy, northern Africa, Spain, and Asia Minor. The most important of these colonies was that of Carthage, built and planned after the city of Tyre. The Carthaginians continued to develop wealth by trade in the same manner as the parent colony. They developed sufficient strength to again and again cope with the Roman nation, but were finally overthrown. During the

period of Phœnician supremacy, the Greeks developed a limited commerce, although her states, cities, and colonies were largely self-sufficient. Rome was not a commercial nation, for primarily her wealth came from agriculture, and when she became strong enough to gain her wealth by trade, she obtained it by conquest and plunder instead. Yet many ships laden with foreign goods came up the Po and the Tiber and visited the seaport towns.

Mediæval Commerce.

The great commercial period which lies between the fall of the Roman Empire, 476 A.D., and the discovery of America by Columbus is marked by three important developments: namely, Byzantine commerce, the rise of the Italian cities, and the organization of the Hanseatic League. After Constantine established the seat of the empire at Byzantium, this city gradually grew into a center of Oriental trade. For a thousand years the strait of Bosphorus was the gateway of trade between the East and the West; for a thousand years the trade of the Mediterranean Sea and the caravan routes was focused at Byzantium or Constantinople. During the Dark Ages the city of Constantinople fostered what little commerce existed in the East, while in the west of Europe the monasteries and princes encouraged and controlled trade.

It was an age of national distrust and national hostilities, but a passive trade was carried on between various nations, generally conducted by foreign traders. Charlemagne, by extending the boundaries of his territory, made it possible to encourage traffic in foreign goods. The Arab Moors at first greatly opposed traffic with the Orient, but subsequently encouraged it, but it remained

for the Crusades to acquaint the East with the West and open once more the trade of nations.

The commerce of the Middle Ages reached its highest development through the Italian cities. The cities of Amalfi, Genoa, Pisa, Venice, and Florence, in southern Europe, were ready to take advantage of trade relations that sprung up between the East and the West; indeed, they began their great career by transporting the troops and goods of the Crusaders to Palestine. From this time on, the cities grew in wealth, Venice being the leader of all in trade. The Venetians had been natural sailors for five hundred years prior to the Crusades, hence they were more ready than any other national group to take advantage of maritime trade. It is estimated that in the fourteenth century Venice had three thousand merchant ships, manned by twenty-five thousand seamen. The Venetians began their commercial career by supplying fish and salt to the world, in exchange for which they obtained food, clothing, and timber for their galleys; but their chief wealth arose from trade with the Orient. They brought the rich silks and manufactured articles of the Orient and exchanged them with products of western and northern Europe. The merchants of Venice thus had the advantage of an immense traffic, as the Venetians were their own carriers as well as the commercial carriers of other nations. As a consequence, wealth developed rapidly. Indeed, the history of the world shows that the nation which becomes preëminent in commerce usually develops its carrying trade along with it, and that the nation that obtains the supremacy of the carrying trade is very apt to obtain the commercial supremacy of the world.

In conjunction with the trade of the Italian cities we have the organization of the Hanseatic League in the north of Europe. Independent cities entered into a league to protect their trade from pirates and to facilitate the exchange of goods. The number of these cities finally reached eighty-five, of which Hamburg, Lübeck, Bremen, and Cologne were among the important ones. These cities were connected by inland trade with Italian cities, and while the cities of the League grew rapidly in wealth, their prosperity only added to the increase of wealth of the Italian cities, which were gateways to the Oriental trade.

The Hanseatic League established rules for the regulation of trade and developed commerce to a great extent. Primarily established to prevent piracy, to prevent the extortion of lords, and to stimulate production and trade, the League laid the foundation of mercantile law and began the policy of reciprocity and freedom. For four hundred years it was prominent in the control of commerce, and during this time practically monopolized the commerce of northern Europe. It maintained armies and navies and carried on war against kings. But its arbitrary power finally became intolerable and its existence a menace to trade. It began to decline in the latter part of the fourteenth century, and by the end of the fifteenth century it had lost its power. The decline of feudalism and the rise of national life, coupled with the determination of each nation to control its own commerce, and the competition aroused by a developing trade, swept away all concessions and left the League helpless.

Nature of Mediæval Commerce.

The traders of the Middle Ages to a great extent disposed of their goods through markets and fairs which were established on certain days of the week. These originated from the fact that it would be advertised that a certain caravan or ship laden with goods would appear at a certain time, and in order to obtain the goods the people came from all parts of the country. As the cities developed, these became regular markets. Finally the traders who attended to the sale of these goods established regular shops to take care of the surplus goods. As trade became more extended and regular, these shops became continuous and the transporters delivered their goods to the shops. Gradually the shopkeepers became regular importers of goods. From that time on the lines were gradually drawn between the wholesale merchant, importer or jobber, and the retail merchants. The competition in trade led to various restrictions among the cities and towns engaged in trading, and had a tendency to create certain privileges and monopolies. There was much jealousy among the towns, especially among the Italian towns, and much rivalry, which caused bitter feeling. Their salvation, however, lay in the fact that they developed manufactures very rapidly. While the nations or countries that have the carrying trade of commerce have tremendous advantages, no nation has ever built up an extended commerce without having a large amount of raw materials or manufactured products to export to other nations.

The gild merchant, a mediæval institution for the control of trade, was a protective association which

included all those who were engaged in buying and selling goods within a given town. Only those who were members of the gild had the privilege of trade. In this way local merchants protected themselves against traders of other towns and foreign traders as well. Following this protective idea, there came in vogue a body of laws and regulations of trade known as the "law merchant." Merchants made their own rules controlling trade, to suit their own needs. The "gild merchant" was represented in several types. Besides the gild type, the law of the municipality, the central national law, and the law of voluntary, arbitrary bodies included the chief sources of the gild merchant. It laid the foundation of mercantile law.

In England the local gild merchant became prominent at an early period, but subsequently the foreign trade of England fell into the hands of foreigners. Real English commerce began at the appearance of the English traders or "merchants adventurers," as they were called, who began to compete for the carrying trade. Originally the term was applied to merchants who undertook to export goods to new or unrecognized markets, or to merchants of various towns who were organized for their own protection. Finally the company of "Merchants Adventurers" was incorporated, which became a powerful and wealthy association. In 1564 they received a royal charter from Henry VII., under the title of "The Merchants Adventurers of England." This gave a great impetus to an independent national commerce.

Modern Commerce.

Mediæval commerce resembled the ancient commerce in the concentration of trade in towns and cities. The

chief difference existed in the more widely extended area over which it operated, having longer routes of travel and a larger number of stations. It also differed in the larger number of articles for exchange, arising chiefly on account of the development of manufactures and the increased interchange of goods. Modern commerce, which may be said to date from 1492, is marked by oceanic transportation. It was the era of discovery and colonization. First, the invention of the mariner's compass gave an impetus to sea travel. The use of gunpowder brought new means of defense to commerce. The discovery of America opened up new inducements to oceanic travel, and the discovery of a route around the southern part of Africa to the East Indies and another route around the southern part of South America to the Philippine Islands, opened up great ocean highways of travel. This occurred at the period of the rise of modern nations. Portugal, Spain, The Netherlands, England, and France began to compete for the commerce of the world.

The Mercantile System.

During the period of the rise of national commerce there came into existence a system of trade so important as to mark an epoch of history. It has been known as the Mercantile System, and represents a doctrine of trade which has its advocates in modern times. Mercantilism was a distinct step in the evolution of commerce just as monarchy was in the evolution of government. In the fifteenth century there was great confusion of trade, caused by the local jealousies and rivalries among the local and foreign merchants, the Merchants Adventurers, and the Hanse Merchants. A movement was started

which had a double purpose, to bring about unity in domestic affairs and to develop national defense in trade. It was the monarchical principle applied to commercial affairs. It was a process of "state-making and national economy-making at the same time."* Mercantilism represents the transformation and reorganization of industrial society as well as the rise of national commerce. It not only transformed and united the municipal, industrial, and commercial interests, but set up barriers of trade against the encroachments of other nations. To subject local interests to national interests, and to advance the latter beyond the interests of other nations, were the prime motives of the mercantilist doctrine. In the subsequent development of mercantilism it stood for government restrictions on commerce and trade. Restrictions on imports or exports, limitation of the carrying trade to national ships, the tariff on exports and imports, and the attempt to make a favorable balance of trade so as to leave gold and silver in a given country, were some of the cardinal points in its later history. While defective in many of its general tenets, mercantilism was serviceable in building national life and national commerce. Its policy, especially in England and France, had a tremendous power in establishing national supremacy. It subsequently affected The Netherlands, and later, Italy and Germany. In the nineteenth century there was a great reaction from the policy, especially in England; but in more recent times it has revived, so that each nation seeks to protect its foreign commerce either by tariff, subsidy, or reciprocity treaty.

* Schmöller, *The Mercantile System*.

National Competition.

Portugal at first became prominent and obtained a monopoly of the East India trade, especially in the trade in spices, but war with Spain furnished an opportunity for the Dutch, which they readily seized. The early maritime enterprise of Portugal, stimulated by the genius and daring of Prince Henry the Navigator, led to discoveries and an extended commerce. The result was the commercial supremacy of Portugal in India and China and the competition with the Dutch in trade. At the opening of the modern period (1495-1521) Lisbon was the chief emporium for the distribution of Oriental goods, and Portugal reached her zenith of commercial power. The decline of her prestige in the East was followed by her forced union with Spain. After her freedom was obtained (1640), war with The Netherlands further weakened her power; but a commercial treaty with England resulted in the transference of her trade from the Dutch to the English and strengthened the already powerful nation. Spain had a tremendous trade in the Western Hemisphere on account of her colonization and production of the precious metals. This gave her great prestige in the commercial world, but her policy eventually caused her ruin. She failed to develop home manufactures, and the silver obtained from America passed out of Spain into France and The Netherlands to pay for the manufactured articles used by Spain in home consumption and foreign trade.

The rise of the Dutch, whose central cities were Antwerp and Amsterdam, shifted the monopoly of trade to The Netherlands. They soon secured the monopoly of

the East India trade from Portugal. The Dutch were thrifty people who understood the art of commerce. At home they not only developed manufactures, but established a system of banking and finance which was of great service on their own account and also on account of the commerce of the world. The Dutch had a strong mercantile policy which established great fleets for carrying on commerce, for they made commerce an end in itself; but their commercial development had extended beyond their national and political life, and therefore they were not able to hold their own in the competition of nations for trade. Subsequently they lost this trade in the development of the East and West India Companies, which came into competition with them and obtained a monopoly of the trade.

The French and the English.

Down to the time of Henry VIII. the Lombard, Dutch, and Hanse merchants monopolized the most profitable branches of trade. In England, shipping was almost wholly in foreign hands, but the Tudor kings had a special object in exalting wealth and the maritime power of England. A feeling of resentment continued to grow against foreign merchants until it was expressed against the Hanseatic League, whose factory at the Steel Yard operated independent of the laws and social order of England. It was in the reign of Edward VI., in 1552, that the shackles of British trade were broken by placing the Hanse factory on the same basis as other merchants so far as commerce duties were concerned. Subsequently, in the time of Elizabeth, the Steel Yard factory was closed. From this time on British trade was promoted by every

effort of government. The explorations and discoveries by the English during the sixteenth century widely extended commerce. Companies were formed for trade, including the East India Companies and the company of Merchants Adventurers. They controlled a large portion of the export trade, but the whole development of manufactures and trade were under a system of monopolies. These monopolies eventually became oppressive.

But Cromwell, by the celebrated act of 1651, suppressed private monopoly and made a gigantic monopoly of the British government. The law forbade the carrying of goods to or from England or her colonies in any except British vessels. As a result, ship-building sprang up, and subsequently a tremendous trade was developed ; but more than all, the great work of English development during the Tudor period was made secure by this act. In France the same system of restriction was instituted under Colbert, for mercantilism had culminated in France more than in any other country. The idea prevailed that a country grew rich only through its trade balance, and every effort was made to secure the favorable balance of trade through the restriction of exports and imports. But England had become mistress of the seas because of her immense carrying trade and the consequent development of her manufactures and agricultural products.*

Recent Commerce.

The main courses of English trade continued to enlarge down to the end of the Napoleonic wars in 1815, but a new era of commercial development seemed to date from this event. Industrial revolution, brought about

* See p. 366, Economics.

by the introduction of power manufacture, changed the course of commerce by the introduction of machinery in the making of cotton and woolen goods, the building of ship canals, the division of labor, and the development of the factory system. The use of steam and water power, and the quickening of manufactures and of domestic commerce gave a great impetus to foreign trade in England, and her commerce continued to extend. The introduction of the *laissez-faire* doctrine through the teachings of the early economists advocated the removal of restrictions on trade. The Physiocratic doctrine in France had a similar influence in that country. But nations that had gained such prestige under restrictive measures were able to advance without government aid. The commercial supremacy of England continued on account of her large manufacturing interests and her immense carrying trade on the ocean. This was aided by the repeal of the Corn Laws and the development of free trade. By these measures England had a cheaper food with which to feed her army of workers. Having built up her commerce, having become mistress of the seas, having developed a foundation for manufactures, England entered upon free trade at the opportune moment. Her commerce and trade went forward with a bound.

American Carrying Trade.

In the nineteenth century, America became England's great competitor in the carrying trade. Down to 1857 the carrying trade of the United States increased rapidly; since that time it has relatively declined. This can be attributed to several causes: first, the Civil War, which absorbed all the energies of the United States for several

years, had a tendency to destroy merchant marine rather than develop it. England also had an advantage, since 1860, in the construction of steel vessels. The tariff has prevented a development of American shipping, and the immense internal improvement of the United States has absorbed capital that otherwise might have gone into the international commerce. The accompanying table shows the relative decline of the carrying trade.

THE VALUE OF UNITED STATES IMPORTS AND EXPORTS AND THE PERCENTAGE CARRIED IN AMERICAN VESSELS.

	<i>Exports and Imports</i>	<i>Per Cent.</i>
1857	\$ 723,850,823	70.5
1860	762,288,550	66.5
1870	991,896,899	35.6
1880	1,503,593,404	17.42
1890	1,647,139,093	12.85
1900	2,089,528,616	9.3

Yet, during this period, the United States has become the greatest export nation in the world. Her enormous supply of raw material, agricultural products, and the recent development of manufactures under the administration of a protective tariff have advanced her foreign trade. The following table gives the exports of the four chief industries and shows the rapid development of export trade in recent years.

PRINCIPAL EXPORTS FROM THE UNITED STATES.

	1898	1899	1900	1905
Cotton	\$247,977,311	\$233,656,490	\$266,922,065	\$379,965,014
Bread stuffs ...	333,987,119	273,999,699	262,744,078	107,732,916
Provisions	167,340,960	175,508,608	184,453,055	169,965,873
(Including meat and dairy products)				
Iron, steel, and manufactures.	70,441,109	93,782,431	121,992,590	134,728,363

Development of American Commerce.

Having recovered from the Civil War, the internal commerce of the United States began to expand and subsequently her international trade. Since 1885, she has become a formidable competitor of France, England, and Germany in the world's markets. She has become the greatest manufacturing nation in the world, as well as the greatest export nation. In 1905 the value of her manufactures was about fifteen thousand millions, or greater than the estimated manufactures of the United Kingdom, Germany, and France. The total value of manufactures entering the world's market is estimated at four thousand million; of this the United States supplies but five hundred million, or $12\frac{1}{2}$ per cent. It indicates that there is a vast opportunity for the United States to develop the exportation of manufactured goods. But the discrepancy between the amount of the product and the international trade is not necessarily indicative of an impoverished condition of the United States; indeed, it represents just the opposite. The rapid development of the United States has enabled her to absorb over twelve thousand five hundred millions of her own manufactures and to export less than five hundred millions. This is evidence of tremendous wealth and prosperity; also, it is evidence of the principle that domestic commerce is of far greater importance to the nation than foreign commerce, and that periods of prosperity of the nation cannot be estimated by the amount of its foreign trade. Nevertheless, America is to-day in sharp competition with England, France, and Germany for the markets of the Old World and for the newer markets of Africa, South America, and the Orient.

EXPORTS OF THE UNITED STATES BY SOURCES OF PRODUCTION.

<i>Percentage</i>	<i>1860</i>	<i>1904</i>
Agriculture	81.13	59.48
Domestic manufacture	12.76	31.52
Raw products (miscel.)	1.41	.40
Fisheries	1.31	.60
Forests	3.26	4.80
Mining .....	.13	3.20
	100.00	100.00

Causes of Commercial Success.

The commercial success of a nation depends primarily upon the amount of raw materials and manufactured articles that it has to export after the home consumption has been abundantly supplied ; upon transportation by land and water from the interior to the seaboard ; a cheap and bountiful food supply for a thrifty and vigorous labor population ; the development of the merchant marine, and the successful choice of trade routes whereby vessels may be laden with marketable goods for the return voyage. Moreover, it is necessary in modern times that merchants promote and advertise their interests in the countries in which they are seeking market. The question, too, of the good will of nations is very important, and commercial treaties which promote favorable terms of trade are exceedingly valuable. The tariff may be a detriment to foreign trade, but it may also be used at times, like other restrictive measures, to temporarily promote the welfare of a nation. However, to the nation that has large resources of raw material and abundant food supply, first-class labor power, abundant opportunities for steam, water, and electric power, free international

trade would be a great advantage in the long run. Some nations have advanced their carrying trade by giving subsidies to the ship companies. This may develop for a time the number of the ships owned by the exporting nation giving the subsidy, but in the long run it is detrimental to national welfare and development.*

Principles of International Trade.

Commerce is an instrument by which commodities are placed in the hands of consumers, and that system of commerce which will do this the most effectually and at the least cost is of greatest benefit to the consumer. In the thrifty nation, domestic commerce is of far greater importance than international. In modern times, through universality of invention, through steam and electricity applied to machinery, each nation becomes more and more self-sufficient and independent in the supply of manufactured goods. The agricultural product is limited by the soil and climate, and a nation must import what it cannot raise. The exportation of the surplus goods of a nation has a great influence on its prosperity, but the power to consume all of its raw materials and manufactured products may be evidence of greater financial prosperity, for it is only a small number of workers of any nation who are putting labor power into products for international trade. It is estimated that between one-fifth and one-sixth of the wage-earners of Great Britain are putting labor power into goods for exportation to foreign markets. Sooner or later, as all foreign trade must balance, the imports and exports of all the nations combined must be the same. There is a theory that

* See Chapter III., Book IV.

the wealth of a nation is made by its trade balance and that the extent to which exports exceed imports is evidence of national prosperity and power. But this is a false assumption, for if a nation imports goods, it is an evidence that it has means to pay for them and also assumes that there is some advantage to be gained in the importation of these goods.* In other words, the nation that purchases abroad has added to its own stock of wealth; on the other hand, it may be selling goods that might be consumed at home but are put upon the market to satisfy some more urgent demand of indebtedness. Yet, in the long run, a nation could not continue to import goods without loss unless it should be followed by a period of export trade. However, international trade may benefit all nations engaged in it just as domestic trade may benefit all individuals engaged in it. The gains, however, in international trade, are of the same nature as the gains of domestic trade, that is, they are merely relative.

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* See Chapter VI., Book III.

BOOK IV.

PUBLIC ECONOMICS.

BOOK IV.

ESTABLISHING ECONOMIC

CHAPTER I.

RESTRICTIVE MEASURES.

Free Trade and Free Competition.

As has been previously stated, the laws of pure economics are based upon the condition of free trade and free competition. That is, if laws act with precision the condition of free trade and free competition must be fulfilled without hindrance. There must be no monopoly to prevent the competition, or other hindering restrictions on trade. All philosophical discussions of political economy recognize these principles. That these conditions are the best for economic society is not necessarily true.

Mercantilists.

The first great group of economists were the Mercantilists, who advocated among other things restrictive measures in trade. They held that all gains in a nation arose from trade, and that certain laws should be established for keeping money in the country and preventing its going out, as the amount of money was an indication of the amount of wealth of a community. This principle extends restrictive measures in trade and attempts to control certain industries. The advocacy of restriction was carried to such an extent as almost to exclude the consideration of freedom of trade and industry.

Physiocrats.

There followed a group of people who advocated among other things the principle that all values arise ultimately

from the soil, and they sought to promote agriculture and industry, and to place little value upon trade as a means of developing wealth. They advocated also the freedom of trade, and that all restrictions should be taken from it. This led later to the development of the *laissez-faire* doctrine.

Adam Smith followed, with his *Wealth of Nations*, which really established the principle of freedom of trade. The nations, having tried restriction, found it to be a detriment, and to so greatly interfere with trade as to retard their growth, and finally reacted in favor of non-interference and free trade. The philosophers held that all interference of the government was a detriment to the progress of nations; that if they would let things alone the laws of trade would be established according to justice and the best interests of the community; that each individual seeking his own interest would seek the interest of the community at large. This theory prevailed to a large extent, and the world felt the influence of it for many years; but it finally awoke to the idea that no one formula or theory could at all times govern the actions of nations in relation to trade, and that, as political laws were made to establish and insure freedom, it was necessary, in order to secure freedom and justice in the commercial world, to establish certain regulations; and so the modern world has reacted from this position of *laissez-faire*. Perhaps the growth of monopolies, which has tended at all times to break down free competition and free trade, has promoted the interference of nations in regard to the regulation of trade and industry.

Modern Restrictions Upon Industry and Trade.

A large number of laws have been passed restricting industry and trade; protective tariffs indulged in to a greater or less extent by all nations; laws regulating and limiting the power of corporations; laws regulating the limits of certain industries,—all show the development of a tendency toward restrictive measures.

Legislation in Favor of Labor.

We find also a large number of laws made for the insurance of the rights of labor; laws controlling the building of factories, for the protection of life and limb, sanitation and safety of the laborers,—all showing that the government has its interest in all classes of people. A large number of labor commissions in the States of the Union and in various foreign countries which inquire into the condition of labor and recommend certain laws concerning its protection and control, show the tendency of restrictive measures in this line.

Legislation in Favor of Commerce.

Much legislation has been done to develop commerce. The carrying trade of different nations has been encouraged by laws and subsidies. Also, the extension of railroads has been encouraged by means of land grants and subsidies; nations have given encouragement to commerce and commercial enterprises by the development of canals and water-ways. There are many other means for the encouragement of commerce. The Interstate Commerce Commission, established by the United States Government to inquire into the conditions of railroads and commerce in general in the United States and for their restriction and

regulation, and the various state commissions, all have a tendency to place transportation within proper bounds.

Legislation Regulating Industry.

Considerable legislation has taken place in recent years to encourage the development of the resources of the country. At one time a bounty was given for the production of beet and cane sugar, which had a tendency to develop that industry for a time. Had it continued, the United States would soon have had sufficient sugar manufactories to supply its own needs. Whether this would have been a wise movement or not would have depended upon the effect in increased taxation and the effect upon other industries and trade. Bounties have been given for the planting of forest trees in semi-arid districts. The protective tariff is urged as a means of developing home industries.

Government Restriction of Monopolies.

The prohibition of the manufacture of certain articles has been declared in various instances. A law against the manufacture and sale of intoxicating drinks is among the most important. Other industries are purposely burdened by a process of taxation, such as liquors, tobacco, oleomargarine, etc. These taxes are laid with a view to the partial suppression of the traffic. While at times they have more or less influence, upon the whole they are ineffective as prohibitive measures.

Plane of Competition.

There is a great discussion and a wide difference of opinion as to the extent to which the government should

go in the control of industries. The fundamental principle lying at the base of all this may be stated: That the government should regulate all competition. It should set a limit beyond which competition should not go; it should also aid and assist certain industries if possible by general legislation, without special favoritism and without detriment to other industries.

Government Should Realize to the People the Benefits of Monopoly.

Having determined the plane of competition so that there is freedom and justice within certain limits, the government should go a step farther, and realize to the people the benefits of a monopoly which exists from the nature of things. There is no reason why the government should allow the development of a certain phase of industrial life which shall overshadow and overbear the efforts of a large portion of our citizens in industrial life, any more than it should allow the growth of a certain phase of political life which shall overshadow and overbear a large number of citizens, oppressing them and preventing them from having the freedom and rights of political life. Therefore, wherever this monopolistic power becomes oppressive and unjust and un-American, it should be regulated by the government. Take the case of the street-railway corporations and the gas companies. Franchises are granted to a few persons in the name of a corporation for the purpose of serving the public. The people own the streets through which these persons operate, and by their vote exclude all but a few individuals from carrying on the special business. It is right that the people should

have a rental for the use of the streets by private parties to the exclusion of all others; it is absurd not to charge the rental. Hence, in the form of a franchise tax or cheaper rates, or both, or in the form of municipal ownership, the government must realize to the people the benefits of the monopoly arising on account of rental of streets and public property.

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CHAPTER II.

PUBLIC CONTROL OF INDUSTRIES.

General Management of Industries.

There are several ways in which the state or government may deal with industries: First, it may let them entirely alone, leaving them to the laws of trade and competition on the supposition that the largest justice will be meted out without any interference; second, it may establish such rules and regulations as would control them within particular limits; third, it may own and operate such industries as seem necessary for the benefit of the community. Perhaps no one of these rules could be laid down as universally correct, for the government seeks under all circumstances to provide for the well-being of the community at large, and may do anything that is possible or necessary for securing this well-being. The question to be considered is: What will produce that largest well-being at the least expense to the community? In other words, What is expedient to do under the circumstances? rather than, What is theoretically just?

In many instances there are industries to be let alone entirely, with the exception of certain rules of justice applying to the intercourse of individuals. Second, there are those industries which are better controlled with certain laws and regulations for the purpose of determining and securing justice for the people. In the third place,

there are those industries that are difficult to regulate and which it would be an advantage to the people for the state to own and control, and under such circumstances one must presume almost entirely upon proper administration of affairs in order to secure justice.

Control by Commissions.

One of the most important of modern methods for the control of industry is represented in the growth of railroad commissions in the United States. These commissions vary in regard to their powers. Most of them are simply advisory and limited in their jurisdiction. Some of them have great power to act. The Interstate Commerce Commission has done a vast deal to regulate industry, notwithstanding the fact that its powers have been greatly curtailed by the courts, having established uniform systems of bookkeeping and uniform methods of reports. They have established that public carriers are public servants, and are amenable to the public for their wrong-doings; and have also done much toward establishing uniform rates and preventing extortion. The same may be said of nearly every railroad commission in the United States. These commissions gradually gain the confidence of the people and gain more power; and while many people advocate the public ownership of the railroads as a public necessity, it appears that it will be determined in most instances that the increasing power of the commissions will eventually furnish them ample control and regulation.

Government Ownership of Railroads.

There are many who advocate the government ownership of railroads because they are said to be natural monopolies.

At best, they can only be said to be partial monopolies; and a system of government ownership, as established in different communities and states, has not proved entirely satisfactory. It would entail a vast debt on the United States to procure all the railroads, which are now capitalized at over ten billions of dollars. It would involve the employment of a vast army of people, which, if not put upon the civil-service rules, would be a dangerous political power.

It would have some advantages in insuring a uniform system of rates and of traffic. It would prevent extortion and injustice, which sometimes prevail. It would prevent waste in some ways by the consolidation of different lines and the abolishment of parallel roads. It would prevent waste in the management, dispensing with numerous high-salaried officials. And yet, on the other hand, without wise management railroads might fail to yield a dividend sufficient to defray the interest on the payment of a necessary sinking fund for the reduction of the debt which must be assumed in the purchase of the roads. In comparing European management with American management, there is more progressive development in certain lines found in American railroads than in any others in the world. Indeed, Europeans are patterning after Americans with respect to equipment and comfort. It also seems proper that the United States should pattern after the European lines in perfection of road-bed and precautions for safety. But the advantage of government ownership in regard to all of these matters is not evident, for England has a better system than is found on the Continent, and still under pri-

vate management. Many persons urging government control of railroads in the United States have failed to observe the enormous mileage compared with that of some of the European nations. It will be observed that the conditions vary in different countries, and consequently the same rule will not apply to all. (See Table I.)

Laws Controlling Corporations.

But whatever takes place in regard to specific industries, the general laws controlling corporations need careful supervision and enlargement. There should be more specific care in regard to such matters. It appears, then, that something should be done respecting corporation regulations. Restrictions should be placed upon methods of organization, the granting of franchises, and, in fact, laws made controlling and limiting the operation of corporations.

Municipal Ownership of Gas- and Water-Works.

It would seem that in cities where water is furnished for the people at large, it should be done by the city itself rather than be left to private corporations. The water-supply is so essential to the sanitation, health and convenience of all the people, it seems to be a very improper thing for a city to allow it to pass from under its control. Whatever is the expense, whether great or less under city control, there can be no question that every municipality should own and manage its water-works, regardless of inconvenience and expense.

In regard to the gas-supply, it is a great question whether or not the city should own and operate its gas plant. There are several methods to be observed where the city owns its

gas plant. In the first place, a normal price may be charged for the gas and the surplus turned into the public treasury to lighten taxation. In the second place, the gas may be furnished at a very low price, the city neither gaining nor losing by the operation. The third proposition is a combination of these two ideas, the gas being furnished to the people at something below the normal rate and still having a surplus for the treasury,—less than in the other case.

As to the *right* of municipal ownership, there can be no question. The streets belong to the people at large, and no excessive monopoly should be given to any persons without adequate return. The city itself has a better right to use these streets to establish its own industries than has any private corporation or monopoly. There are many things pointing towards the expediency of the city ownership of gas.

Government Management versus Government Ownership.

Those who advocate government ownership state that a revenue would be returned to the city which would benefit the community. Under wise management this may prove true; but it sometimes happens that a deficit occurs in city administration, and this revenue is not obtained. There is always an attendant danger to business where politics prevails to a large extent. Until we reach a period where municipal government shall be conducted on a business basis, there can be no assurance that the gas-supply will yield a return to the city. It is urged also that political influence will be lessened by government ownership. It is held that under private corporations corruption is developed and the city council is elected by corrupt

methods, so that corporations have their own way; while under municipal ownership this would disappear,—the records would show whether business was properly managed and the funds properly used. However, unless the increased responsibility would bring a better class of citizens to act as officers, there could scarcely be any improvement in this line. It would seem that government control, wisely administered, would reach the same ends. Wherever the cities have managed their own gas-works there has been a tendency to furnish a better quality of gas, at reduced rates. Where good business methods have prevailed they have made a financial success of the enterprise; where bad business methods have prevailed they have made a failure.

Disposal of Public Franchises.

One modern method of disposing of public franchises seems to be a solution of the problem in a very satisfactory way. That is, the putting up at auction of all franchises to which the public rights are granted, and disposing of them to the highest bidder, letting only to responsible parties. These franchises are granted for a limited period of time, with the privilege of the municipality to purchase them at a normal price, or to renew, as it sees fit. In addition to this, the bid provides for the payment of a certain per cent. of the gross proceeds into the public treasury. A provision is also made that the article furnished shall be of a certain grade and furnished at a maximum price. With these restrictions there is no reason why the municipality should not realize the benefits of the monopoly with certainty without government ownership. Under present conditions of most municipal governments this is far preferable to government ownership.

Economic Freedom Demands Restrictive Laws.

A great many people seem to hold that while laws should be established for the control of civil liberty, the state has no right to interfere with the economic life. The growing importance of economic life, however, has rendered it the base of all modern operations. All legislation rests more, in these days, upon trade industries, commerce, capital, labor, corporations, and industries in general, than upon the bare fact of securing civil and political justice. The latter has to a great extent already been secured in our own country. It appears that industrial liberty or economic freedom should be maintained, and that it is just as essential to establish some general laws and restrictions upon trade and industry to secure economic freedom as it is to make political and civil laws for the security of political and civil freedom; and that this can be done without the state passing beyond its legitimate function in providing for the general well-being of the community.

The Modern Trust.

There has recently sprung up a form of financial organization called the "trust," which has developed stupendous proportions. Within recent years it took the form of the organization of separate corporations into a pseudo over-corporation. The pseudo over-corporation took all of the corporations of a given industry into an association, issuing so much stock to each or else giving to each a certain proportion of the income of the new organization called the trust. That is, the business of the various corporations was held in trust by the super-organization, which might be dissolved at any time. There was a great question whether

the trust was responsible as an organization or not, as it held itself ready to dissolve at any time. But by the power of law it has been forced more and more to become one large corporation, absorbing into one definite organization all of the other corporations, the latter losing their identity in the former.

The progress of the trust as it attempted to absorb all competing industries in a given line has been very marked, and the rapidity with which the trusts have been organized and in which small industries have been absorbed has created alarm in the minds of the people. At the close of the year 1897 there were 111 trusts, none of which had a smaller capital than \$1,000,000; while at the close of the year 1898, 98 more were formed, with an aggregate capital of about \$2,000,000,000,—making the capital of all trusts formed by the close of the year 1898 equal to about \$5,000,000,000, or about one-fifth of the assessed valuation of the taxable property in the United States at the time of the census of 1890. The following are some of the principal trusts formed during the past few years, with their estimated or known capital: Joint Traffic Association, \$1,404,130,581; Federal Steel Company, \$200,000,000;* Reading Coal Company, \$150,000,000; Western Union Telegraph Company, \$95,370,000; American Sugar Refining Company, \$73,936,000; Standard Oil Company, \$97,500,000; Wholesale Grocers' Association of New England, \$75,000,000; Central Lumber Company, \$70,000,000; United States Leather Company, \$62,711,100; Chicago and Milwaukee Brewers' Association, \$60,000,000; New England Insurance Exchange (84 fire insurance

* The United States Steel Company has now a capitalization of \$1,404,000,000.

companies), \$58,537,167; Steel Rail Association, \$50,000,000; Chemical Combine, \$50,000,000; Carnegie Steel Company, \$35,000,000; Consolidated Gas Company of New York, \$35,430,060. Some recently proposed organizations are the Flour Trust, with a capital of \$150,000,000; the Knit Goods Company, with a capital of \$30,000,000; and the Thread Company, with a capital of \$18,000,000. With the opening of the year 1899 trusts with gigantic capitalization were formed with wonderful rapidity, to the great alarm of many people.

The chief objection urged against trusts by the people is, that they destroy competition and crush out the smaller concerns. That they destroy competition, is true to a certain extent; but as there has never been a complete organization of any given industry, there is always a threatened competition. And it is a fact that on account of the concentration of a given industry, prices are more stable under the organization of the trust, and that in the long run they average lower than under the competition of many small concerns. The wants of the community, both in manufactures and trade, are more carefully estimated by this means of social organization.

That they crush out smaller concerns, is true; and while the people at large may reap a benefit in reduced prices and more stable business life by the crushing out of the small concerns, it is a great detriment to the local communities where these concerns are established. In a Western town there was situated a barbed-wire factory—an independent concern, which had grown up from a very small beginning until it employed 200 men and did a very

large amount of business. The trust absorbed this institution into its main body. The object of the trust was to control the output so as to prevent prices from declining, as they had reached such a low basis that profits were very small, and they thus desired to hold to monopoly prices and monopoly profits. What was the result? The owners of the local plant received a large sum for their factory, indeed much larger than the actual value of the plant under ordinary business prospects would warrant. It will be noticed that trusts always pay high for local enterprises. This means that they anticipated making larger returns than were made by the smaller concerns when worked separately. It will be observed, however, that this can be done only by the reduction of expenditures and by the establishment of monopoly prices. It is a mistake to suppose that because an organization controls an entire industry it can charge such prices as it pleases. Yet many investors in stock of trusts called "industrials" are led to suppose this to be true. The fact is, after they become complete monopolies they must be controlled by monopoly prices and monopoly profits and threatened competition. (See Monopoly Profits, *supra*.) Another result is, that a large amount of money has come into the town which will immediately seek other investments,—probably in the town itself; and while the trust destroys one business in the town, it leaves a large amount of free capital to invest in other businesses. Another result in the case in point which is more detrimental to the progress of the town is, that 200 men with their families, probably 1,000 persons in all, are thrown out of employment. Many of these will leave for other

places, and, unless as stated other businesses spring up, trade will fall off with the merchants and a general detriment to the community will ensue. This local destruction of business is one of the greatest evils of the modern trust; yet even it may have a compensation in the fact that a large amount of capital is freed for new enterprises,—and it is, after all, the free capital of the community that makes a business.

Another objection to the modern trust made by the people is, that the power of concentrated capital to influence legislation is great. No doubt this is the greatest danger in connection with it. It has this power if it desires to use it. Yet the danger here is not as great as it might appear, for when a trust controls the entire output of any industry it has less desire to control legislation in its own interest than have several large competing concerns which attempt to take advantage of one another. Nevertheless, because they are never free from competition, as competition is between corporation and corporation and trust and trust, there may still be a desire for influencing legislation in various forms.

It is objected that trusts raise prices by restricting production, and keep down wages. The fact is, the trusts to date have paid as high wages as the lesser corporations; and when it is observed that there is an opportunity to pay higher wages there than elsewhere, no doubt wage-earners will receive their full share of the business. Wages are certainly higher in proportion to interest and profits under the higher organization of industry than under the lower, where there were many competing groups. The real truth

about the trust is that it becomes a great corporation which will terrify us by its size, but which may be regulated by careful legislation so that its dangers may be turned into benefits to the people.

The United States enacted an anti-trust law in 1890, which declares that combinations, or contracts in the form of trusts or otherwise, or even a conspiracy against trade or commerce throughout the several states of the Union or with foreign nations, was illegal; and insisted that every person or combination of persons who attempt to monopolize any particular trade or commerce among the several states is guilty of a misdemeanor. Many states also have attempted to make laws against trusts, and have succeeded at least in bringing before the people the subject of trusts, and in creating a great deal of discussion as to its nature, benefits, and dangers.

“Government by Injunction.”

The anti-trust laws and interstate commerce act have been responsible for introducing a new form of regulation, called “government by injunction.” It is simply the enlargement of the restraint which is exercised to prevent certain acts of individuals which are contrary to law. It is used largely for the control of labor organizations. This has been extended to apply to parties engaged in strikes. If strikers conduct themselves so as to restrict trade or commerce among the states, they are guilty of violation of the law. The injunction was used in 1894 merely to facilitate the application of these laws and to prevent their violation. The anti-trust law of the United States and of the various states would include labor organizations under

its operations; therefore these laws are far-reaching, and have a tendency to show the magnitude of the trust question and its regulation.

Most of the trusts formed are broken down or will break down; many are being formed now on a fictitious basis, developing a great volume of stocks and industrials which sooner or later must lead many to failure. Many which survive the shock of public opinion or adverse legislation will pass into the form of gigantic corporations, whose actions will be amenable to the law. While the rapid development of trusts has caused unnecessary alarm, they, like other forms of industrial life, need regulating by the laws of the United States and the various states thereof. The courts and the legislative power, if properly directed, will certainly regulate trusts so that they will prove a benefit rather than a detriment to the people at large. A uniform tax, if properly levied, would bring these organizations into subjection to the will of the people. A tax which would destroy the extra business profit gained thereby would be not only constitutional, but effective in the regulation of trusts. It would be constitutional because it would be attacking a certain form of trusts, and such a tax would come in under the police regulation. It is a question which the modern student must examine very carefully. Whether eventually it will lead to socialism, no one can tell; but the author apprehends that it will not.

State Socialism.*

Some go so far as to advocate government ownership of all industries, all lands, mines, manufactories, means

* See Chapter VIII, Bk. II, Part II.

of transportation, stores,—and in fact that all industries should be placed under the state management, and that all persons should be employed by the state, each then receiving his remuneration from one central authority. This is not at all necessary for the security of economic or industrial freedom. It is also accompanied by many dangers, from the fact that no formula will cure the selfishness of human beings, and that state socialism would be merely the means of concentrating such selfishness. Power given to the people in this manner to regulate all industries would end only in the few regulating the many, with the result of a revolution on the part of the many.

Significance of Public Economics.

Public economics have become very important in modern industrial life. It is impossible to consider private economics without coming in contact with the relations of the state to trade and industry. No persons can justly be considered well versed in political economy, nor indeed understand the full relations of the people to one another, without a full consideration of public economics.

CHAPTER III.

TAXATION AND REVENUE.

Relation of Taxation to Private Economics.

The question of taxes is one of distribution, generally speaking, because it must be considered as one of the ways in which the surplus product is disposed of. Also, it may be considered as the means of a part of production, inasmuch as it stimulates production and the producer must enter it as one of his necessary expenses. Burdensome taxes may oppress industries and prevent the development of economic life. A tax that is not burdensome may do nothing more than stimulate the extra energy necessary for the increased production to cover the amount of the taxes.

Taxation a Means of Improving Economic Processes.

Because of the expenditures of the government in maintaining roads, promoting justice and equality, and protecting life and property, taxes are among the best investments for the improvement of economic processes. While we may speak of private economics and the great laws of supply and demand, we must understand that these laws would not develop without proper governmental protection, and that taxes are absolutely essential for the development of all economics. Especially is this so when we consider public economics; for we find the tax system closely related to public economics. We cannot escape its use or

its importance under such circumstances. Taxes should be administered with a great deal of care, and their assessment and collection and expenditure more carefully guarded than almost any other public institution.

Definitions.

Taxes have been defined as forced contributions of the people for the support of the government. They are not debts in the ordinary sense of the word, for they are not contracted by the payer. Neither are they paid for protection of life and property, but are placed in the general fund for government disbursement. As there is only one party to the transaction, they are called one-sided transfers, or forced contributions.

Judge Cooley defines taxes as "being the enforced proportional contribution of persons and property levied by the authority of the state for the support of the government, and for all public needs." This definition upon the whole is correct from an economic standpoint, with the exception that taxes are sometimes levied, not for the purpose of public need, but for private appropriation; but if we include in all public needs all public expenses, or those funds which the government needs for carrying out all the functions of government, then the definition is correct. For, indeed, the constitution of New York provides that "the assent of two-thirds of the members elected to each branch of the legislature shall be requisite to pass a bill appropriating the public moneys for *local* or *private* purposes."

Paul Leroy-Beaulieu, in his *Traite de la Science des Finances*, defines taxes in these simple words: "Taxes are simply contributions demanded of citizens as their

share of the expenses of the government." And in a more elaborate manner, he continues on a subsequent page: "Every contribution regularly demanded of the citizens by the stated authorities of the land for meeting the expenses of the government, is a tax." Again, if we are to take this definition in its full meaning, we must include in that term "expenses of the government," all expenses of the government in fulfilling its legitimate function as a representative of the nation. We must also say, in addition to this, that taxes are sometimes levied for the purpose of encouraging manufactures, as in the case of the protective tariff; for the sake of rendering void a law, as in the case of the Federal taxes on state bank notes, for suppressing their circulation; or, in the case of the extensive taxes on whisky and tobacco, for the purpose of suppressing vice. So that, in the definition, taxes may mean something more than the collection of revenue for the bare support of the government machinery.

There is a legal fiction that taxes are given in exchange for protection; but it will be noticed that the sovereign state demands this contribution of citizens regardless of any value which may come to the citizen in return for the contribution. The law, itself, always fails to recognize in taxation any of the principles which apply to purchase or sale and to contracts and debts resulting therefrom. But do not taxes, in an indirect way, benefit the tax-payer? Certainly they do, but not in a way similar to that implied in a contract arising through purchase or sale. While there is but one party to the proceeding, the other party may, in an indirect way, on account of the keeping up

of social organization and the improvement of the means of creating and holding property, reap a just reward in this general return. But suppose a person says, "I do not want to be taxed, and I'll not enter into this contract; I don't want to be protected,—I can take care of myself." Does the state pay any attention to him, and release him from his share of the obligation? No; he is a part of the great social organization, which has determined by long custom, common consent, and legal authority, that a certain amount of funds shall be collected from each individual citizen according to his person or his property, and that these common funds shall be expended for the general use of the community; and as long as he remains in a community the individual must pay the taxes.

There is sometimes an assertion made in this connection, that taxes, though paid into the public treasury, will in time turn to the pockets of the tax-payer. But this is a false supposition, if we try to make it specific. Suppose a farmer pays \$50 in taxes. In order to get this \$50 he sold the produce off his farm. Now, if the government does not lay out the \$50 in farm produce, it will not revert to the farmer. Suppose the government does expend \$50 for this same farmer: it will do it by purchasing \$50 worth of produce; that is, the tax-collector, the agent of the government, says: "You may have your money back by paying me its equivalent, \$50 in produce." Upon this basis we have an extended argument that the keeping of soldiers and sailors will increase the demand for products, and thus will enhance the general welfare of the community. But this is only a nominal market and not a real

market. To keep useless industries for the sake of enlarging the market is a false theory. The only way in which taxes can help industry by the expenditure of funds, is to make a better system of communication, to keep better order, or to bring about favorable conditions of business. So, also, for the protection idea. The person who pays the least taxes may sometimes require the greater protection of life and property, and he who pays most may be in a position to better protect himself and his property than he who pays little.

Purposes of Taxation.

Taxation, then, though it is easily defined and seems a simple thing, becomes of great magnitude when we begin to inquire into the philosophy of its existence, into all the relations to which it gives rise between the governing and the governed. It is a question of supreme importance, of far-reaching consequences. "Taxation may create monopolies, or it may prevent them; it may diffuse wealth, or it may control it; it may promote labor or equality of rights, or it may tend to the establishment of tyranny and despotism; it may be used to bring about reform, or it may be used to aggravate existing grievances and foster dissensions between classes; taxation may be so contrived by the skillful hand as to give free scope and every opportunity for the creation of wealth or for the advancement of all true interests of states and cities, or it may be so shaped by ignoramuses as to place a dead weight upon a community in the race for industrial supremacy." (R. T. Ely.)

Taxes, then, have for their purpose the general good

of the community, and so long as they tend to give this and are levied with a fair measure of equality, they subserve their purpose and affirm their right to existence. When taxes are once paid into the treasury of the government, their disbursement may take place, not only for the expenses of the government machinery, but also for the protection of industries as a means of directing society in certain channels, and for general public improvement. The whole community is to be benefitted, directly or indirectly. (See Kentucky Court of Appeals Case, *Cooley*, 489.)

Canons of Taxation.

Although taxation is comparatively modern, we have found that systems have developed along with the progress of modern government. They have been practiced long enough to develop a certain number of principles which lie at the foundation of the philosophy of good government.

Many of these principles were advocated by Adam Smith, and have been reiterated by all writers on taxation from his time. The first general principle is, that the subject of every state ought to contribute to the support of the government as nearly as possible in proportion to his respective ability, this ability being estimated by the amount of revenue he enjoys under the protection of the state. And by this last sentence it is understood that, living within and under the protection of the state, the amount of revenue which he enjoys is to be an index of his ability to pay for the support of the general good; or as Mill says, "Equal taxation is equality of sacrifice."

People as a rule do not like to be taxed, because they

do not receive an immediate and tangible return for what they pay out, as they do in the case of the exchange of commodities. The return which they get is, indeed, very general and indirect. But there is an indirect return through the general good of society of which the individual tax-payer is a member.

They also object to the payment of taxes because they imagine that they are unjust. And, indeed, no one ever knew a tax without a grain of injustice. John Sherman said in one of his speeches in the Senate, "I never knew a tax that was not odious and unpopular to the people who pay it"; while Mr. McCulloch has succeeded in utilizing two of Pope's lines as follows:

"Whoever hopes a faultless tax to see,
Hopes what ne'er was, is not, and ne'er shall be."

And doubtless this is a successful application of poetry to economics. But still, Sherman's strong assertion needs some qualification, for there certainly is a difference between a popular and an unpopular tax; and while no one really enjoys taxation, not all taxes are odious. But the liability to fraud leads a man to imagine that he is paying more than he ought, and that there is a way of escape. This causes dissatisfaction, and a tendency on the part of many to evade taxation. However, it should be stated that a tax should be quite satisfactory to the people who pay it, and should be so assessed as to give the least possible opportunity for fraud.

Another well-known principle is, that taxes ought to be certain, and not arbitrary, as to quantity, time of payment, and manner of payment. In feudal times, and

sometimes indeed in modern history, the principles of taxation have been violated in this respect. Kings and potentates have levied taxes suddenly, and without warning, and collected them in an arbitrary and offensive manner, thus violating this principle. But modern assessments have tended to recognize all of these principles, as to the certainty of taxation, and a fixed time of payment, and have specified clearly the manner in which these taxes must be paid.

A third principle is, that taxes ought to be levied in the manner most suitable to the payer; that is, the time and manner of payment should be as best suit his convenience. The preceding principle holds to the definiteness of procedure, while the latter holds that this definiteness should be so arranged as to best suit the convenience of the taxpayer. Thus, it is more convenient for the farmer to pay his taxes soon after he receives returns from his harvested crops; persons receiving wages by the week or by the month could more readily pay their taxes quarterly; and a day-laborer finds the most convenient to pay is that which he pays daily through a tax on commodities. Generally, enlightened nations are beginning to observe this rule to a considerable extent, for we find that the convenience of the tax-payer is consulted in the times set for the payment of taxes.

One of the most important of the principles of taxation is, that taxes ought to take as little as possible out of the pocket of the tax-payer over and above what is paid into the public treasury. This is an argument in favor of the careful expenditure of funds, as well as the proper method

of assessment and collection of them. An improper tax may lead to great injustice by taking unnecessarily from the pockets of the people what ultimately reaches the treasury, a surplus that is expended in the collection of the tax, or that reaches the pocket of corrupt officials. Or again, if a greater assessment is made than is required to meet public needs, it results in heaping up in the public treasury a large amount of funds, which may lead to extravagance, and that in turn lead to injustice.

The economic idea of taxation is, that the fund collected as tax is to be more profitably expended by the government than it would be if left to private enterprise. Being drawn from the combined earnings of all the citizens, the tax is to be so handled that it will yield a larger economic return than the tax itself; and also a larger return than the money would yield if handled in small amounts by the individuals themselves. Sometimes taxes have been so heavy as to be little better than robbery. So much was taken out of the pockets of the people that it burdened the industries which they tried to carry on, and thus the taxes were a positive detriment to the entire community. But in this connection it may be said that the least tax is not always the best tax; for, while it is a very bad plan to have an extravagant tax, a niggardly tax which barely supports the functions of the government is a detriment to the progress of the people. Correct financiering will avoid an overflowing treasury and a lavish expenditure, or a government bordering on paternalism, on the one hand; and on the other it will avoid an empty treasury, and a meager outlay that barely keeps the government in a

proper existence and does nothing for the general welfare of the people. Thus, the building of bridges, public parks, and highways, the development of the systems of supervision and inspection which enhance the power of economic society, can all be carried on better under the direction of the general government than they would if left to the haphazard, irresponsible, irregular ways of individuals.

Just and Equitable Taxation.

A great deal has been said about just and equitable taxation. And these indefinite terms have led to a large measure of senseless discussion. Doubtless, a just and equitable taxation is the one least burdensome, although these taxes cannot fall equally upon all individuals. There must be discrimination. The basis of operation should always rest upon equality of sacrifice, and should never involve unnecessary taxation of anyone. It is said that there is a tendency in taxes to move along the line of least resistance; which, if it be true, means that somebody pays more than his share, while others escape. Owing to the nature of taxation, it having sprung up irregularly through the development of society, it has been a very difficult matter to adjust it so that each one should bear his own proper share of the expenses of the government. Taxes were first paid by the weak and those unable to resist them. Indeed, to-day it may be said that of all the great questions before the American people, that of equal and just taxation is the greatest. Our system has been in confusion for a period of years, and, as time develops, we see very little order coming out of the chaos. We need a thorough revision of our tax system, which shall combine harmony, simplicity, and proper discrimination in all assessments and levies.

Incidence of Taxation.

A subject which has caused a great deal of discussion in the theory of taxation, and about which there is much controversy to this day, as it is still an unsettled question, is that of the "Incidence of Taxation." By it we indicate or determine upon whom the tax ultimately falls. A tax is sometimes levied upon one person and seemingly paid by him, but in reality has been shifted to another; and the incidence of taxation answers only one question, viz.: Upon whom does the tax ultimately fall? A tax may be borne by the person upon whom it is levied, or it may be shifted to others, who in turn may shift it to a third party. And this shifting may be done either knowingly or unknowingly by the person who shifts. We should carefully discriminate between shifting and evasion, for evasion is simply a failure to pay a tax at all by avoiding it, while shifting is the process of referring the tax to others to pay. But in this respect we do not at all consider the effect of taxation, but merely upon whom the taxes fall. It is, then, a question of great importance, for indeed upon it the whole theory and practice of modern taxation rest.

The theory was discussed as early as 1651 by Hobbs, in his *Leviathan*, who advocated a general excise so that those who paid taxes would not feel them a burden, not knowing when they pay them nor how much they pay. And Cradock holds that taxes should fall so that the burden will be borne insensibly by the tax-payers. And Thos. Mun, in 1664, held that in proportion as the necessities of life increase in value, so the rate of wages will rise, and taxes will be shifted accordingly from the wage-

earner to the employer and the rich. Sir William Petty held, in 1672, that under such circumstances the employing producer will bear the taxes because the incidence falls on him. The question received much discussion from time to time, and has been revived of late by Mr. Seligman, Mr. Ross, and others. A careful inquiry into this principle will show us that many of our so-called direct taxes may in time be shifted as are the so-called indirect taxes; so that really the distinction between direct and indirect taxes is largely in the mind of the legislator as to what he intends shall be direct and indirect, rather than in the practice of the tax itself.

The poll, or capitation tax, must fall upon the individual upon whom it is laid, and cannot be shifted, except when it falls upon the wage-earner, and then it will not be shifted unless it falls upon the margin of his necessary subsistence. That is, when wages are below the nominal rate and taxes are laid upon wages, they will be shifted to the employer; when wages are above the nominal rate, taxes upon the wage-earner will be borne by him.

Taxes upon inheritances and bequests cannot possibly be shifted; the property is in sight, and it must yield to the return of the levy. An internal tax may or may not be shifted, though in the greater majority of cases it is shifted in whole or in part. The tax on imports is generally called an indirect tax, and as a general rule it will be shifted in whole or in part, although exact determination will depend upon each individual case. The tax on monopolies cannot be shifted, except in special cases.

The income tax, though a direct tax in theory, may fre-

quently be shifted to others. Take, for example, the income tax of England, which is a combination of taxes on separate categories of income, and it happens that it is merely a tax on gross revenue or gross receipts; and in such cases it is generally true that the income tax follows the movement of other taxes in regard to incidence. In a case where a tax is laid on pure income, it is really a tax on economic rent added to the tax on net profits and the tax on wages. Now, we know that taxes on economic rent and net profits cannot be shifted, except in the case of wage-earners, and it will have a tendency to stay where it is placed in regard to wage-earners. Nevertheless, these are only tendencies, and we have no absolute assurance that an income tax in a country where we find no pure income will remain where it is put.

Now the difficulty in all taxation is not found in the fact that some taxes can be shifted and others cannot, but it is in knowing just when taxes will be shifted and when they will not, so that we can understand upon whom the taxes will fall, and thus double taxation and unjust levies be avoided. If a person desires to reach certain members of society directly, let him choose the group of taxes including those on monopoly, net profits, inheritances, and certain forms of property and income. If he desires to reach persons indirectly and have taxes paid unawares by the payer, let him choose taxes on commodities, in the shape of import duties, special excise duties, licenses, and taxes on gross receipts and corporations.

Classification of Taxes.

Perhaps, before we go further into this discussion, it will be a good plan to outline briefly the various kinds of

taxes in common use in our country, and generally throughout other countries. The first great division of taxes is in respect to *direct* and *indirect* taxes. It must be stated that this classification is of comparatively little value as the incidence of taxation becomes better understood. It is of more difficulty to determine what is a direct tax.

Direct taxes are those supposed to fall immediately upon the person who ultimately pays them. They have their various advantages: they are said to promote good citizenship, because the person who pays knows to what extent he has paid, and for what purpose, and having paid so much into the treasury he will follow it more closely to see that it is justly expended than he would in many cases where he does not know how much he has paid nor for what purpose.

Direct taxes are said to be less expensive than indirect. In 1881 the cost of collecting the taxes on commodities was estimated at 5.13 per cent., while the cost of raising the revenue from direct taxes in 1876 was 3.5 per cent. In Prussia, in 1860, the direct taxes cost 4 per cent. and the indirect taxes, with the exception of the Salt Monopoly, cost 12 per cent. In 1883 and 1884 the cost from direct taxes was 7 per cent., while those revenues from indirect taxes had fallen in cost to $9\frac{1}{2}$ per cent.

Poll Tax.—The poll tax, as is indicated by its name, falls upon the individual. It is an old form of taxation, arising from feudal times out of service to the feudal master. There is a renewal of this old-time service when the commissioner summons me to appear on the street at a certain hour of the morning with a shovel to work out my road tax; it is a reminder of the old feudal régime.

A great many object to the poll tax because if a person is poor and unable to pay it there is danger of his being reduced to poverty and then relegated to the ranks of paupers and criminals; it is idle to collect taxes of this class to keep up almshouses and prisons, while we are making the class larger all the time by so doing. While there is a grain of sense in this, there is another side to the subject. Taxation when not excessive stimulates production rather than represses it. There is a happy mean to be maintained in all transactions. Productive enterprise will be enhanced and capacity for economic production will be made greater, and by the use of moderate taxation one will redouble his energies. Then, there is a question of citizenship. I believe that a person who is not frugal enough, industrious enough, and manly enough, to earn two or three dollars a year to pay for the privilege of citizenship, has no right to be a citizen. If taxation without representation is tyranny, taxation is also a badge of liberty, which every man should bear in some form or other. It is true, you say, he does bear that in the taxation on commodities. To a certain extent that is true. Nevertheless, I believe it is a good thing if he be summoned by the proper authorities to "appear with a shovel," that he may understand that there is a government over him whose interests he is bound to respect.

Income Tax.—The income tax is, theoretically, the most nearly correct tax that we have, but yet the most difficult to collect. It falls upon the net income of individuals, and therefore fulfills the canon which requires the tax to vary according to the revenues which people enjoy. If a man

has no income, then he will have no tax; if his income becomes greater, his taxes become greater accordingly; if his income declines, his taxes decline also. The difficulty has been that in practice, the tax does not vary so much with the rise and fall of income, as with the ability and inclination of the payer to evade the tax. Our experience with the Federal Income Tax, from 1861 to 1872, a period of ten years in actual operation, was very unpleasant. It came upon us suddenly, as an episode and as a war measure, and was to be only provisional. During its whole existence the laws were modified each year by Congress trying to readjust matters so that the tax might fall with equal justness upon all and without complaint. The income tax failed because it did not have a fair trial; because it was poorly managed from the beginning; because there were those who disliked it on account of its being *too* just for them; and finally, on account of the unwillingness of persons to give proper returns.

The income tax has been tried in a mild way in Pennsylvania and in other states, but it has never gained a great success in America. However, we know that it has been successfully tried in Prussia, in Switzerland, and in England. In England it is a part of the general system of taxation. It was introduced in 1798 by William Pitt as a war measure, and intended to remain only during a short time. It gradually grew into the English system, and though the same complaints of unjustness are urged against the tax as ever, it is still retained as a part of the system, and probably will be on account of its general easy management. The English income tax is based upon what is known as the sliding scale.

A few years ago a new income and property tax was established in Switzerland, in the canton Vaud. Since then it has been developed in other cantons of Switzerland. All real property is divided into three grades. For all estates whose capital, maximum value, is \$3,000, the rate of taxation is one per cent. per thousand; maximum capital \$20,000, rate $1\frac{1}{2}$ per cent. per thousand; on all capitals exceeding \$20,000, the rate is 2 per cent. Personal property also is divided into seven grades, and assessed at 1, $1\frac{1}{2}$, 2, $2\frac{1}{2}$, 3, $3\frac{1}{2}$ and per cent. per thousand for respective grades. Incomes are divided into seven classes, and \$80 is subtracted from the income for every dependent upon that income before the tax is levied. Thus, a man who has ten children and \$1,000 income would have to pay a tax of fifty cents, while a bachelor with the same income would have to pay a tax of \$15. And one wonders in this case how much the government would owe the man with fourteen children! Possibly he should draw a pension from the government for at least three of them. Whatever we might say of France and America, doubtless this is an encouragement which Switzerland does not need, *i. e.*, that of large families.

The general arguments used against the income tax formerly in force in this country are as follows:

First, it was claimed to be unconstitutional;

Second, it required government inspection of private interests;

Third, as improper returns were given, it led to dishonesty and to an unjustness of taxation;

Fourth, it discriminated between persons having large and those having small incomes.

Fifth, it was an odious tax, hated by the people;

Sixth, it was an expensive tax.

There is not sufficient space to discuss all of these various objections. It is pertinent to say that the party which objected so strongly to the income tax during the war, subsequently undertook to place it in practice again. Its constitutionality has been twice decided; once in its favor, and more recently against it. That it was obnoxious and evaded, no one can deny; but that it did not have a fair trial and was not properly managed, is easy to affirm and prove. Doubtless, it was one of the least injurious taxes levied during the war, and with the exception of the tax on national banks it was the cheapest tax levied. The discrimination of this tax was not greater than is now found in the personal-property tax of to-day, and a careful examination into our own real-property tax will show us that the latter has many evils attributed to the income tax. Yet the experiment in the time of a great war, when all is confusion, is not a sufficient test of the effectiveness of any method of taxation. However, it appears to me that if we return to the income tax, it should be a part of a great system of taxation, and should be a state rather than a federal tax, and that it should enter permanently into our system in harmony with other taxes; not to be used as a temporary affair for the raising of funds for a few years.

Real-Property Tax.—The real-property tax is one of the oldest known taxes. Taxes upon real property, or immovable property as it is called in Europe, means taxes on lands, houses, mills, factories, etc.

There is one great advantage of the real tax, that the

property upon which it is assessed is always displayed; it can be found and recounted;—and this has led us to think that it is more nearly just than any other. But a careful study of the property tax in America leads us to discover many errors and unjust discriminations. Compare the estimation of property and taxes levied in any county with other counties of the state, and also with other states from the Atlantic to the Pacific, and such a variety of assessments and rates is indeed astonishing. I have heard of cases, too, of actual fraud, where a certain man of a good deal of power and influence has his taxes set at a certain rate. A new assessor being elected, desiring to make all things equal, raises the assessment a little. The result is, the wealthy man goes before the board of equalization and has it reduced to what he terms its proper proportion. A few examples of this kind serve to relegate such assessor to the background in politics.

Personal-Property Tax.—The personal-property tax, which has been so long in vogue, is doubtless as difficult to assess as is the income tax. It is difficult to-day for the assessor or for the person who makes the returns to give a just estimate as to the proper assessment. The number of irregularities in this tax is greater to-day than in any other tax that we have. It is certainly the worst tax that we have. But we ask, why is it not abolished? For the reason that it is supposed to reach a certain class of property which cannot be reached in any other way, and if all taxation were taken from personal property there would be a tendency to turn, either permanently or temporarily, a large class of property into the form of what is known as personal property. There have been

some attempts to reform the present personal-property tax by taxing mortgages and other forms of security, but as a rule they have only made bad matters worse.

From 1871 to 1884 there was a shrinkage of assessment of personal property in the city of New York of \$107,184,371; yet everybody knows that the amount of real property increased very rapidly during that period, and everybody knows that the amount of personal property has kept pace with the increase of real property. It is said, also, that in the city of Philadelphia there are fewer watches possessed by the private citizens each succeeding year. It is true that the faithful assessment and collection of the personal tax varies greatly in different states, and in different towns, which shows that there is a possibility of improving bad taxation. Either this tax ought to be reformed through a better political conscience or a better system of public administration, or it ought to be done away with entirely.

Franchise Tax.—The franchise tax is rapidly coming into vogue in Europe and in many of the eastern states and cities. It seems to be one of the best taxes that we have for reaching corporations; and by that I do not mean that the corporations should pay more than their proportionate amount of taxes, either in this or in any other form. It is becoming customary to grant franchises on the agreement of the company to pay a certain per cent. of the gross receipts into the public treasury. These franchises are let for a term of years to the highest bidder. The method has certainly worked well.

Inheritance Tax.—Another form of taxation is the inheritance tax, a tax much considered in these days. The

Maryland law taxes collateral inheritances over \$500 at a rate of $2\frac{1}{2}$ per cent. New York and Pennsylvania have voted a 5-per-cent. tax on collateral inheritances. But New York has adopted a direct inheritance tax of 1 per cent., and it is said that the estate of the late Jay Gould yielded a return of about \$700,000. There are some features in connection with the use of the inheritance tax that would make it necessary to use it with great discrimination. However, there seems to be no real general opposition to it as a theoretically good tax. There would need to be careful discrimination in the case where a man, his wife and sons, had earned the farm by working together coöperatively; and when he passed away it would certainly be injustice to tax the farm before it could pass into their hands. A great many other points might be cited in the application of this tax where it might lead to injustice. There is no reason, however, why a large estate should, without taxation, descend to a person when not willed to him.

Indirect Taxes.—The indirect taxes are usually those levied upon commodities. They may be either internal revenue, or export or import duties. Indirect taxes are those supposed to be shifted to the consumers by the person who pays them. Theoretically they are considered to violate the principle of equal taxation; to obstruct trade; to foster monopoly; and are congenial to despotism and aristocracy. This is generally said of all indirect taxes. But the difficult question is, whether a direct tax or an indirect tax is wanted; or which will best subserve the purpose intended. Without doubt, the best system of taxation is a combination of the direct and indirect

taxes. It is easy to criticize either group under present circumstances.

The most prominent indirect tax of to-day is the so-called protective tariff,—a tax of a peculiar nature which performs, at least in its full intent and purpose, a double function, that of raising revenue and protecting home industry. This tax has been before the people for nearly a hundred years; it has been the greatest political war-cry ever in existence. It has been magnified clear beyond its just proportions in its power to improve or retard our industrial conditions. It is a question of great importance among a score of other important questions to be decided by our commonwealth.

There is not space to enter into arguments for or against the tax on commodities, for protection or for free trade. We are doubtless all familiar with its oft-quoted arguments. The tariff controversy and tariff history are in themselves a solid year's study. Attention is called to a few principles which may have been overlooked in this great tariff discussion.

The first principle is, that we cannot tell what is best for our nation by following the examples of others. Indeed, we find England prospering under free trade; France and Germany prospering under protection; and the United States has prospered under protection. It stands to reason that we should have prospered whether we had had free trade or protection, and that we shall prosper, whatever system we adopt. It is also evident, at least, that it is not a matter so much whether we have high protection or low protection, or free trade, as that we know twenty or thirty years ahead what our sys-

tem is that we have adopted, and can be sure that there will be no sudden changes or tinkering with this great system. For, whether the tariff has been a detriment to the United States or not, we know that various changes have been wrought through the crooked journey over which our financial life has come, which have been detrimental to the progress of the American people. A nation may need a tariff or it may not, just as a man may need an overcoat or he may not. In all probability he does not need an overcoat when the sun is burning down upon him and the thermometer records ninety degrees in the shade.

It is sometimes held that the protective tariff improves the wages of the American laborer. Doubtless it has an indirect influence upon the laborer, but, it is to be feared, not just in the way in which it is sometimes claimed. In the past few years it will have been observed by those who have watched the rise and fall of wages, that this is to be attributed to more potent influences than that of the protective tariff. The tariff has been entirely overestimated in its power to advance or retard prosperity. It is not a correct inference that because you raise the tariff on all kinds of iron products there will be a rise in the wages of the iron-workers. Indeed, as a rule, it has not proved true. Suppose there is a rise in the tariff on woolen goods: are the wages of the workers in wool increased? Undoubtedly it is only through a general system of protective tariff, provided a nation is in a position to need one, that industries may be stimulated, that a greater demand for labor may be created, or that a standard of living may be kept up which will have a tendency to en-

large the opportunity of the wage-earner to earn greater wages and will give him more ability to earn them. But this is only in a very general way, on the basis of a nation developing a variety of industries and its wealth of natural resources.

Again, it is claimed that if an article bears a certain price without protection, its wholesale price will be equal to the first cost plus the protective duty. This is not always true. There will be a tendency for the manufactured domestic product to rise to the equilibrium of the imported product plus the duty on it; but this point will seldom be reached, on account of the competition induced by stimulated industries. And it must be admitted that a protective tariff does stimulate industries. This is historically correct; but the question is whether it stimulates industries at the expense of something else or not, or whether in the long run we shall not be better off not to have the industry stimulated for a short time, only to pass into a period of depression of the whole country.

The prune industry of California is a good example. Prunes are destined to be one of the great fruit-foods of America. Suppose dealers can ship prunes into New York and sell them in the market three-fourths of a cent cheaper than can the fruit-growers of California. The question is, shall we put a tariff on prunes of three-fourths of one per cent., to allow California to have a fair competition in the market of our nation with that of Spain? Can the prune-eaters of America afford that for the sake of developing a great natural resource of America? I think they can. Under such circumstances, a high tariff of three or four cents a pound might be quite a monopoly to a few

individuals at the expense of a great majority of the people.

And so we have a basis for the establishment of protection on equality of sacrifice; each section would be benefitted according to the articles it has to protect. But that section which has no articles to protect either directly or indirectly may not gain much by the process. But the cardinal objection is, if Cuba can raise sugar cheaper than we can, why not let her raise it, and we will raise something else in exchange for sugar? This is one of the most forcible objections to the protective tariff. And it is easy to see that if a tariff becomes extensive it will work a positive detriment by destroying our foreign trade. It is not true, however, that it would be better for us to raise corn and cotton as England desires us to do, and let her do the manufacturing. That philosophy does not hold in economy, for there are other things to be considered in national life and national economy than this. (See *International Values*.) But in so far as a protective tariff is usually adjusted so as to improperly shut off foreign trade, it as a rule works a detriment to the nation that establishes it.

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CHAPTER IV.

A RATIONAL SYSTEM OF FINANCE AND TAXATION.

Irregular Development of Finance and Taxation.

The development of industry has led to many changes in the character of property. It has brought about an increase in the number of forms in which property exists. The aim of taxation has been to reach every new kind of property coming into existence. Thus, in the early period of the history of the nation, farming was the chief occupation. There was a very small amount of corporate property, a comparatively small amount of what is known as personal property in stocks and bonds and other wealth, and likewise a comparatively small amount in mills and factories. It was then a very easy matter to ascertain the amount of property each person had, and to assess it regularly. The property that one had represented the capacity to pay more nearly than it does when a variety of property has come into use.

In the history of the development of taxation the state has attempted to do justice to all in levying a tax on each separate kind of property. It has resulted in a great many irregularities of taxation. While it has led to double taxation in many instances, it has also allowed certain kinds of property to escape paying its just proportion of taxes according to capacity. There has not been a systematic plan prepared for general taxation on a basis of the incidence of taxes. When a tax is once levied and collected

on a given property, it is not easy to dispose of it or to change it for a tax of another kind; and the attempts made have been isolated and fragmentary legislation, which has tended to confuse matters more than would have been the case had the subject been approached in a more rational manner. As you cannot touch one method of taxation to reform it without interfering with the whole tax system, reforms in taxation should be in charge of a commission which would systematically study the effect of every kind of tax in the state, ascertaining carefully who really bears the burden of taxation. While every one feels the need of a reform in taxation, we perhaps shall never reach rational improvement until we go to work systematically and reform the entire system.

Imperfections of Modern Taxation.

The imperfections of taxation have arisen largely in the attempts of the government to reach all forms of property, on the one hand, and the attempts of people who possess the property to evade or to reduce taxes on the other. The system of rational taxation based upon capacity or equality of sacrifice has been departed from to a great extent. Many of the principles of taxation have been violated.

Again, taxes have been collected for the purpose of carrying on public functions which might well have been dispensed with. Accompanying the expansion of industry has been the expansion of government. While the essential functions of government have remained steady, demanding an increasing amount of expenditure instead of a decreasing, other and new functions have been added to the gov-

ernment, which have added to the burdens of the people. Even when it is correct in theory and principle and general expediency to introduce new duties of government, these new duties often have not yielded any adequate return to the people for a number of years, and in the attempt to expand the service of the government of the people many things have been tried which have been nothing but a positive waste to the community. Many difficulties of assessment have also arisen to increase the evil conditions of the case. Fleeting forms of property have led to a pursuit by the legislator and the tax-gatherer which has increased the imperfections of the system.

Methods of Collecting Revenues.

From the early history of this nation we have collected the national revenue largely from a tariff on imports. This has nearly always been accompanied by a plea for protection to American industries. While it has cost the people an enormous amount in proportion to the revenue, it still has been quite satisfactory to them as a method of raising revenue. The evil condition of it, so far as a system of finance is concerned, is in the fact that in attempting to gain the largest revenue out of it injustice may be done to certain classes of industries or certain sections of the country. On the other hand, in attempting to protect certain industries or sections of the country, the revenue may be small and inadequate. Yet this tax has grown historically into the nation, and is such a power in the development of the industry of the country that it is likely to be retained in the United States, although many times it may be detrimental to the best interests of the country,

so far as commerce and the rational development of industry are concerned.

The revenues from the sale of public lands, which were so important in the early history of the nation, have gradually declined into comparative insignificance. Revenues from incomes were collected in the war period from 1862 to 1872. This tax was declared constitutional at one time, but a subsequent law, passed by Congress August 27, 1894, was declared unconstitutional by decisions of the Supreme Court on April 8 and May 20, 1895.

The tax on home products, which is also a tax on consumption, has long been a means of raising the public revenue. The tax on beer, liquor, tobacco, etc., seems to have become a means of raising revenue. There is no real reason why such commodities should be singled out of all others and taxed, except it is an easy way of taxation, and also aims at a luxury and an evil. It is difficult to ascertain the real influence of such a tax in suppressing evil, for it leads to adulteration of goods and falls heavily upon consumers, many of whom are among the poorer classes of people.

New taxes, such as the franchise tax, largely in municipalities, and the inheritance tax in states, have come gradually into use. The old tax on property has been a prominent factor in our system, although abandoned in nearly every other nation in the world. While we have recognized the shifting of property to other forms, we still cling to the old form as a necessary means of raising revenue. So far as land is concerned, no better tax will ever be found; but the taxation of improvements and personal

property becomes more irregular every year of its existence.

Double Taxation.

The attempt to tax property in a variety of forms has led to much double taxation. Thus, when a state taxes the land and the mortgage and the money lent on the mortgage, there is double taxation, and in some instances triple taxation. The mortgage was a new kind of property, and it was felt that the burden of taxes was falling upon the borrower and owner of the land, and not upon the lender of money. As the person who holds the mortgage generally shifts the tax upon the borrower, the latter pays the tax on his mortgage. And then if he takes the money and puts it in improvements or stock on his farm, he pays taxes on that again. The man who has property in sight almost always does the heavy paying of taxes. The attempt to tax the income of a property with an additional tax on the property itself, is another form of double taxation. Also, if a man is conducting business and his property is taxed and then a tax is levied upon his business, he is taxed double. There can be nothing absolutely wrong in taxing the same person for the same thing in two different ways, but it leads to injustice if it develops a looseness of taxation which leads to inequality. When only a part of the people are thus taxed and others go free, injustice arises.

It is wrong not to tax mortgages when a man's property is nearly all vested in them. Yet, as it is possible for him to shift this tax upon the mortgagee by charging him a higher rate of interest, it is idle to tax him. The property must be taxed in some other way, namely: that of

income. A direct income tax, properly classified, cannot be shifted. The question of debts in taxation is a grievous one. A man must be taxed, however, upon what he has, and not upon what he has not. The rational way of considering the taxation of mortgages is as follows: If the assessed valuation of a given farm is \$4,000 and there is a mortgage on this land of \$2,000, it is evident the property in the land represents the entire property in question, on the supposition that half of the value is covered by the mortgage. Now all of the tax may be levied on the land and allow the mortgage to go free, or all of the tax on the land and allow the mortgage to be taxed in addition, or allow half of the tax to be levied on the mortgage and half on the land. There is no doubt that the latter method is the logically correct and just one, but wherever it has been tried it has proved detrimental to the borrowers, and those who borrow have been obliged to lose the amount of the tax in another way.

Another difficulty arises in the constant shrinkage of the value of land. If the value of the land declines one-half and the mortgage be assessed at its full value, the mortgagee will be paying more than his proper proportion, unless he can shift it. The only way would be to assess the land at its full market value and then to insist that he pay a just proportion; or, as I shall relate below, put the mortgage in an entirely different category and tax the land on its full valuation.

Taxation of Corporations.

Double taxation is more readily shown in the history of corporation taxes than in any other way. It illustrates

the attempt of a tax to adjust itself to new kinds of property while still clinging to the old systems of taxation. In the early history of the United States the corporations were so few that when they did come into existence they were not noticed as having a special form of property. Finally, they were treated as individuals under the general-property tax. But as time passed on it was realized that in the form of improvements, bonds, stocks, fixtures, etc., corporations had a variety of property which was not reached by the ordinary property tax.

To meet these various forms of property, commissions for the taxation of transportation companies in certain states have been established. Corporations have been taxed by different methods in different states, according to the principles of taxation prevailing in those different states.

The taxation of property has gradually given way to the taxation of certain forms which represent their tax-paying capacity. Among these forms we find: First, valuable property; second, franchises. These taxes may be estimated on cost of property, capital stock at par value, capital stock at market value, capital stock plus bonded debt at market value, capital stock according to dividends, capital stock plus total debt both funded and floating, gross earnings, net earnings, bonded debt or loans, business transacted, and dividends. These various methods of attempting to reach taxable property of corporations have caused confusion on account of irregularity within the state, and especially because various separate states have different methods of taxation which greatly interfere with

interstate property and non-resident property-holders. It has led to double taxation in no less than five different ways.

The importance of taxation of corporations is then very great. If the principles of the old property tax are to be maintained, they must be treated differently from individuals. If local taxation is to prevail, it should rest upon real estate only. A franchise tax of a certain per cent. of the gross earnings of the corporation paid into the public treasury should be a constant factor in the taxation of all corporations, for the reason that they, having frequently special privileges granted them by the people, should thus make a public recognition of the same. Over and above this, a tax on their capital and loans might be a means of reaching all the paying capacity of the corporation. If the property is taxed, the capital stock should go free, and if a tax is placed upon loans, then no tax should be laid upon bond-holders.

Interstate agreements should be made concerning interstate corporations, so that the residence of the share-holders or bond-holders would be immaterial, and arrangements made so that taxation of property in one state would not be duplicated in another. By some process of this kind, possibly there might be a rational system for the taxation of corporations; but even that will be found inadequate.

Single Tax.

To get rid of the confusion of taxation with all of its irregularity and waste, many people have advocated a single tax on land values. This has many advantages: In its simplicity,—the land is always in sight and it can be

easily assessed; second, a tax on the economic income of land cannot be shifted. The taxes would be taken off all improvements and personal property, which would give an impetus to all industries, would develop the soil, and would have a tendency to bring into use all vacant land. This in the long run would increase the value of all other business.

But the defects of the system are evident in the fact that no single tax on any form of property is sufficient to meet the variety of forms of property existing in modern times. Hence this tax cannot be advocated as a cure-all for all the evils of taxation.

The irregularities of the property tax, as seen in the assessment of real estate and also in the returns of personal property, insist that there must be a change in the former and an abolition of the latter. It is one of the discouraging features of our progress, that as soon as a man puts forth extra energy, endures special sacrifices to put in a form of machinery, to build a house for the protection of his home and family, adds stock to his farm, or new machinery for its better tillage, the assessor immediately appears upon the scene and rewards him for his improvement of the country by laying an extra burden of taxes upon him. Every one knows that the improved home, the improved machinery, and the large amount of stock on the farm, will not only bring benefits to the person who establishes it, but will lead to a largely increased social benefit. In coming to the point of a rational system of taxation, we must insist—first, that it shall be simple; second, that it shall be so arranged as to reach the entire tax-paying capacity of the individuals of the community.

Land and Income Tax.

Perhaps the simplest method of reaching the taxing capacity of a community is in a combination of the land and income taxes,—the assessment of land at its full valuation on what is determined by its economic rent, or as is commonly known, a tax on land values. It is simply an estimation of the value of land shown by the income over and above the cost of production. Let this assessment be carefully made. Exempt all personal property and goods from taxation, and then place a tax on incomes from whatsoever source, except that of land, and all forms of property will be reached. In the taxation of incomes a careful classification of the income, from whatever source, should be made, and the tax should be graded so as to meet all forms of income according to sources. Thus, a classification of salaries, of incomes from manufacturing, merchandising, stocks and bonds, etc., should be made.

As before noticed, we have in combination two forms of taxation,—one the easiest to assess and collect, and the other the most difficult. But when reduced to a system, the income tax could be more readily collected than the present general-property tax, excepting the tax on land. The great difficulty with the income tax as levied in the United States is, that it has been in addition to other forms of taxation, which has led to a seeming injustice. This form of land and income taxation has been successfully used in New Zealand, and in the first year of its trial the same amount of revenue was raised as had formerly been raised with the various methods employed, and with greater justice than previously.

Inequitable Assessment.

With this method we should lose all of the inequality of assessment which now pertains to the personal-property tax. We also should be obliged to enforce an equity of assessment of real estate which does not now exist. Though land is in sight, there exists the greatest inequality of assessment and taxation.

The first principle of reform should be to insist that land should be taxed at its full market value, or with a reference to the economic rent of such properties and with the elimination of the element of improvements, and thus assessment could be more readily determined than is usually supposed. As soon as we depart from the actual value of property as a basis of taxation, we begin to develop irregularity and injustice in assessment.

Thus, for example, in the assessment in Kansas in 1896, in Cowley county, real estate was assessed at 25 per cent. of its real market value; in Johnson county, 40 to 50 per cent.; in McPherson county, 40 per cent.; in Reno county, from 25 to 33 1-3 per cent. In Ottawa county, land was placed at from one dollar to one dollar and twenty-five cents per acre, and other property at one-fourth value. In Dickinson county, real estate was assessed at 25 per cent. of its actual value; in Saline county, land was 33 1-3 per cent. of its actual value. But this irregularity was found more noticeable on property not in land. Thus, in Dickinson county corn was assessed at 18 cents per bushel, in Geary 6 cents, in Morris 5 cents, in Ottawa 8 cents, in Wilson 15 cents, in Reno, 4 cents, and in Johnson 10 cents. Wheat was assessed at 45 cents per bushel in Wilson county, 15 cents in Osborne, 10 cents in Ottawa,

50 cents in Dickinson, 60 cents in Sumner, 40 cents in Marshall, and 20 cents in Douglas. Thus there was a variation in the value of corn of from 4 to 24 cents per bushel, in wheat from 10 to 60 cents; also a variation in the value of the cows from \$7 to \$25 in different counties.

This variation was not regulated according to distance from the market and cost of transportation. Each county board of assessors had a different estimate on values and a different method of scheduling property. These irregularities exist in nearly every state in the Union, and before a rational system of taxation can be put in practice a uniform and equitable plan must be adopted and carried out.

Methods of Collection.

One of the prime methods of economy in a financial system is to have taxes regularly collected. Although not so difficult as the assessment, it is essential that the collection of taxes should conform to business methods. In the case of the income tax, should it ever be instituted as a state institution, its collection should be arranged so as to cause no extra expense. Taxes should be paid directly into the hands of the county treasurer for all purposes, and this treasurer should be custodian of all funds, state, county, district or township, except certain funds collected on account of the state, which should be paid over into the state treasury.

One of the defects of the tariff is, that it is difficult to collect the tax. Our custom-houses have been among the most difficult agencies to maintain in the United States. Nor is that all. When the tax has been properly collected at a great expense, the consumer must pay it at an in-

creased expenditure. This makes it difficult to insure justice. The old system of collecting taxes by sending to the individual an agent who received a commission for his services, has been largely dispensed with.

Public Expenditures.

Usually the expenditures from the public treasury are classified into those that go to the support of the government and those paid directly to individuals. By the support of the government is meant not only the payments for the running of the government machinery, such as the salaries of certain officers and the expenses of their offices, but also those funds that are paid out for the general welfare of the community, irrespective of any persons or classes of people. The other group of expenditures is represented in such as is dispensed for charity, pensions, and individual benefits. This classification, however, is not wise, if we wish to grasp the full meaning of government.

We find that there are certain functions of the state essential to its maintenance. Among these are the keeping of order and the protection of property and persons; all regulations concerning the possession, transmission, and exchange of property; the definition and punishment of crime; the establishment of contract rights; the administration of justice; the definition of political duties and privileges; the determination of the relations of citizens; the maintenance of the autonomy of the state in dealing with foreign powers. Without these functions a state cannot be said to exist, for it is in the administration of these that a people is entitled to the right to be called a state. The minimum of expenditures for a state or government

must be in providing for and carrying out these principles of government.

Starting from this point, a government may add anything which the majority determines shall be for the general welfare. There is no limit to the powers of a state controlled by the law of the people, except what the majority cannot do,—that is, the impossible in government. Among optional duties and services of government may be named the following: Education; care of the poor and incapable; regulation of labor; maintenance of systems of transportation and communication, such as railroads and postal and telegraph systems; the manufacture and distribution of public utilities, such as water, gas, etc.; the regulation of industries and trade; improvement of sanitation; cultivation of forests and land; care of fish in rivers; and finally, the regulation of the consumption of food and drink. As there is practically no limit to what a state may vote to do for the people, there can be no limit to their expenditures; therefore it is wisely provided that all expenditures shall be determined by the representatives of the people.

Sometimes charities have been classified as personal expenditures. It is true that the expenditures apply to certain persons, but it is for the benefit of the public. Education applies to certain persons, but it is for the benefit of the public at large. While we establish practically free education, the limitations of individuals are such that many are deprived of exercising the privilege. While we vote funds to help the poor, insane, and blind, it is merely as a public function and not as a charity. The state is

merely seeking to preserve itself in the care of these individuals. The same may be said with regard to the expenditures for penal institutions. While we may attempt to reform criminals, it is not so much for the benefit of the individuals as for the state at large. As far as the state itself is concerned, it has no right to expend anything for individuals. Its final aim must be its own preservation and the welfare of the public at large.

The expenditures for pensions cannot be considered a charity. That is, were there nothing else involved in it than the bare help of individuals, the state would have no right to grant pensions. But it is as a method of paying those who will risk their lives for a state, that pensions are granted. While they appear to be given to a certain class, it is done for the purpose of future defense and welfare. Soldiers who take their lives in their hands to fight the battles of their country receive purposely a very small pay, inadequate for the time of service. Hence it is that the pension is nothing more than a supplementary pay to those who sacrifice most in the service. Therefore, when wisely administered, the pension system is valuable for the preservation of government and the perpetuation of liberty. The amount is only limited by the judicial expenditure for the welfare of the community.

The chief thing to be observed in government expenditure is economy. A thousand things might be presented which in theory might be a benefit to the people, but the good returning from the expenditure would not be equivalent to the money expended with interest on the same,—and this should be the basis of all expenditure. Legis-

lators and officers seldom realize that the money taken from the pockets of the people to be expended by the government should yield a return equivalent to the amount collected plus the interest on the same at an ordinary rate of interest. The calculation, then, of the social, commercial and moral good to a community—in other words, the calculation of the amount of well-being to be gained by any expenditure—must be made by all officers. Well-intentioned people see things that would be an improvement to the community, and therefore advocate the appropriation of funds for this service, when in reality the good derived will in no way be equivalent to the amount of the expenditure. Here as elsewhere, good business consists in keeping down unnecessary and unwise expenses. In ordinary business, many people fail because of spending their entire energy to the increase of income. A large proportion of it ought to be spent in keeping down expenses. It will be found that the prime principle of business success consists in the economy of the wealth at command, and these principles should extend to all public expenditures.

The Budget.

Economy then is very essential in making up the budget of expenditures for every county, state, or government. No doubt if everything was included in the items of expenditure that are proposed every year by some legislators in the United States, our expenditures would be increased a hundred fold, sufficient to bankrupt the state in a year or two. And nearly every one of these propositions for the expenditure of money would be of more or less benefit to the community. But the principle would be violated

that the return for the expenditure should be equivalent to the expenditure plus the interest. In making up the budget of the various states and of the nation, many things are included which cannot be included in the category of wise expenditure. Hence it is that in making up the budget of expenditures, especial care should be taken to include in it only those expenditures which shall be productive of general good to the people. In private business, people limit their expenditures by the supposed amount on hand. In public expenditures, they estimate the needs of legitimate government and levy accordingly upon the people for payment. The principle of public expenditure, then, must be guarded with more care and wisdom than that of private business.

Public Debts.

That expenditures shall not become a burden to the people, it has become customary to borrow money and extend payment over a series of years. It is done on the principle that certain improvements cannot be carried on a little at a time, year after year, and paid for in taxes by the people, so well as to be completed at once and give the people the use of the improvement while they are paying for it. It is wrong to entail upon a single generation all the expenses of public improvements, sometimes desirable and necessary in a single year. On the other hand, the public debts should not be increased so as to impose an excessive burden upon future generations. While the principle of public debt is a good one, it should be guarded very carefully or it may accumulate a burden upon the nation which eventually will lead to its destruction. Each

generation will have its own peculiar burdens to bear, and while it may be helped and given power to act by the improvements made by the preceding generations, these improvements should not be so great as to heap upon succeeding generations such a burden as will prevent them from taking advantage of the necessary improvements of their own times.

The public debts of the nations of the world have become very great. Taking the national, state and municipal indebtedness, the amount of debt is appalling. When this expenditure has been for the improvement of the nation in giving it power and facility in the creation of wealth and the elevation of the standard of life, there can be no cause for alarm. When such debts have been heaped up by fruitless wars and excessive armament, there must be cause for anxiety, though not for alarm. An estimate of 1882 made the public debts of the principal nations of the world amount to about twenty-seven billions of dollars.

If a modern city proposes to give its people the benefits and privileges of a modern government in regard to parks, boulevards, streets, sidewalks, water-works, sanitation, and police system, there must be an enormous expenditure, which ought to be distributed over a period of years in order not to make taxation become a burden to industry. If a city must build a public hall in a given year, it is easy to see that the payment of it, if raised in a single year's levy in addition to all the other expenditures, would be an excessive burden to the people. There is only one way, and that is to distribute it.

Imperfections of Government Machinery.

There is much loss in the assessment, collection and expenditure of public revenue, on account of the imperfections of government machinery. At best, a method of raising revenue and managing expenditures is expensive, but when Americans mix their politics and their public business in such a way as to destroy the best principles of government financiering, they heap upon themselves needless burdens. Every year, men are chosen for office with no especial adaptability for the office except that they have gained favor in serving some political party or are friends to those in power. Then, after they have spent two or three years in learning how to be good financiers, we turn them out of office and put other ignoramuses in their places in order to educate them in their specialty. We shall succeed in public financiering just in proportion as we cease to mix public business and politics in the administration of affairs of state. Nor is incompetency our only fault. For, while government officials in the United States as a whole are honest, there are those who seek public preferment for the sole purpose of exploitation of the government. The political conscience respecting duties to the government, which is in other words duty to the public and the people, seems to be somewhat warped.

It is not, then, the amount of money collected from a given people that should be any cause of worry to them. It is the question of whether they receive ample return for its expenditure in the general well-being of the community. Therefore, in the assessment of taxes, in the collection thereof, in their expenditures, in the needs of

government, and in the perfection of government machinery, there needs to be exercised great wisdom on the part of the sovereign people.

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BOOK V.

METHODS OF ECONOMIC INVESTIGATION.

CHAPTER I.

THE FIELD OF INVESTIGATION.

The study of economics cannot in any way be complete to the modern scholar without a careful investigation of the actual economic conditions. Sometimes this part of political economy is called practical economics as distinguished from the theoretical. In reality it cannot be considered any more practical than a study of the principles of economics, for the whole object of economic investigation is to reveal economic principles in the actual conditions of life. The whole object of political economy is to study economic life, for the ultimate object of its improvement. As investigation without understanding the principles would be of no avail, so principles without their application would not fulfill their mission. In a philosophic sense neither is more practical. The object of investigation, then, is to discover new truths. In a university a double object appears: first, the discovery of the truth; and second, the training of students in methods of investigation.

The Library.

The first consideration is the library. The first phase of economic investigation is found in ascertaining and understanding what others have done before by way of collecting economic statistics or developing economic principles. The library is, therefore, a part of the field to be occupied by the investigator. While a person may enter the field of inves-

tigation on his own account, regardless of what others have done, it will be to a large extent a waste of time and energy, for it might take a year to discover by actual observation what may be obtained in a few days in the library in considering the results of investigations of others. In library investigation there is something more to be considered than the mere fact of learning what others have done. New questions are arising continually in the subject of economics, which must be traced out by a careful comparison of all material bearing directly or indirectly upon the subject, and a logical conclusion reached. This requires a careful understanding of all the material collected on the subject.

Classification of Library Material.

References and discussions of the subject in hand will be found in newspapers, magazines, volumes and documents throughout the library, which must all be noted, collected and weighed before using. It is essential, in the study of these sources, to make a proper classification of all material. There are to be considered first sources, or what might be called original sources. These include documents, written or compiled by actual observers of the process of the subjects in hand, based upon the actual facts in the case. Next to these sources may be counted authorities, written by masters of the science, who in using and interpreting original sources have laid down fundamental principles which are considered conclusive. There are a large number of secondary writings sent out largely for the purpose of propaganda, or to emphasize certain notions. These may be essays, magazine articles, and newspapers. Of magazines, those that are especially de-

voted to some scientific subject contain a large amount of reliable scientific knowledge, which may pass into either the classification of sources or of authorities. But a large portion of that which the individual finds in print will be of little practical value except as sketches of the actual conditions of the subject under investigation. Therefore, the student who enters the library for investigation must have a careful knowledge of the use of the library, and make a great study of the collection, classification and handling of the material there, or his investigation will be in vain.

Field Work.

While the library may be considered the foundation of the laboratory method, the work should be extended into actual life. A person would scarcely be called an economist of the first order who had not inquired on his own account into the conditions of labor and capital, trade and industry, interest, profits and rents, and in fact all the economic conditions of life around him. This is by far more difficult than the library investigation, for the reliability of sources is not evident. To enter a laboring camp to inquire into the relation of employer and employé, the rate of wages, standard of life, requires a different kind of ability from that required in library research. To investigate the conditions of capitalistic enterprise, to determine the cost of production, the market, the laws of supply and demand in actual operation, is by far more difficult than taking records from printed pages, but it will yield larger returns in vitalizing the library processes. It helps one to realize the nature of economic law

and the scope of economic principles. It changes the economist from a mere philosopher into a scientist. It is true that the investigator should not fail to avail himself of such general statistics as may be published from time to time on the subject of his investigation, nor should he neglect any particular statistical work or information ascertained in the specific field being investigated. In the United States we have a census every ten years; the annual publications of the National Bureau of Labor Statistics; the annual publications of the agricultural and educational departments; the publications of the Interstate Commerce Commission; as well as the various publications of the several states on labor statistics, railroads, agriculture, and education. These are among the chief permanent statistical sources in America. To be added to these are scores of lesser reports and special documents which render the field tolerably complete. Nor should there be omitted from this category the public documents of Congress, and the various state legislatures and executive departments, as well as the reports of investigations carried on by the different universities.

Historical Investigation.

While the determination of the conditions of the present and the probability of the future are the chief aims of the economic science, the historical field should not be ignored. While it is not essential to the economist that he be perpetually delving into the principles of Adam Smith and Ricardo, historical reviews of the development of economic science on the one hand and of industrial history on the other would have a tendency to verify the principles of po-

litical economy and to strengthen all modern investigation. When anything is discovered in the field of modern science, the investigator should know at once whether it is something new, or the recurrence of some old phenomenon in a different form. When he thinks he has arrived at a new principle he should know at once whether it has ever been advocated or presented by other writers or investigators. To this end, perhaps, industrial history is more important than the history of political economy, for it presents the various changes that have taken place in the development of the industries of the country; it gives in detailed form the actual wealth production of various kinds, and outlines the manner in which this has changed from century to century. This cannot but add strength to the investigator. While there may be no direct connection or similarity between the corporations of Queen Elizabeth's time and the modern corporation, there will be brought to light by a careful study of the former certain conditions of life which will aid in the proper handling of the latter.

Scope of Economic Investigation.

The economic investigator is limited in his scope only by the relations of wealth production of man. Any phase of economic life may be considered as a part of his field. He should, however, draw a sharp distinction between actual social conditions and economic relations. All forms of production, whether of the raw material or of the finished product; all forms of exchange, whether foreign or domestic; all methods of transportation; everything relating to labor and wages, capital and interest, land and rent, is plainly within the field of the economic investigator.

Every phase of economic organization, including the firm, the corporation, the trust and monopoly, and labor organizations, as well as the organization of industry, are worthy of consideration. The producers and consumers should be the subject of careful investigation, the chief aim being the verification of economic principles, the vitalization of economic philosophy and the modification of economic laws by actual practice and business, and the discovery of a new law or the determination of the old law under a new form. Such, then, should be the scope of economic investigation. Wherever man appears in his wealth-getting and wealth-using capacity, there should go the investigator.

CHAPTER II.

THE MODE OF PROCEDURE.

The Economic Purpose.

In any investigation the purpose must be clearly defined. Many reports have been published which are practically useless because there has been no well-defined purpose in the investigation. A great mass of unclassified material has been presented, in which the vital points are omitted. Attempt as you will to determine any particular proposition, the real information desired is lacking. The individual must start out with a clearly defined notion of what he is to ascertain, and he must collect the material which will best present it. In the consideration of the labor question, for instance, it may be desirable to give a complete review of the entire subject, regardless of any well-defined object to be gained, except a general understanding of it in all its scope and details. But a better kind of investigation is that which seeks to determine some phase of labor, such as the rise or fall in the rate of wages in a given period or in a given industry; or perhaps the rise and fall of the rate of transportation of a given railroad or a given set of railroads; or, to narrow it even more, the rise or fall in the rates on cattle or wheat or any other product whatever within a given period. When the end sought is once determined upon, all material should be gathered and classified in reference to this.

Gathering Material.

The actual records of procedure from day to day, from month to month, from year to year, must be determined. If these have been collected and summarized for him, the work of the investigator is comparatively easy, provided that a uniform system of account-keeping be practiced. And yet a score of questions will arise in the outset in determining the material to be collected, and the method of procedure. Thus, if the rate of wages is considered, it will be necessary at once to determine who are wage-earners. Will the salaries of persons receiving one hundred dollars per month be called wages? If not, will salaries of people receiving twenty dollars per month be called wages or will wages be limited by what has been determined in the courts, the daily earnings of ordinary physical labor? If so, how much mental capacity will one be allowed to use in ordinary physical labor? The fact is, that no labor is conducted without greater or less mental effort; but where shall the line be drawn between mental labor and physical labor? Then, in the rates of wages it will be necessary, in order to reach any determination, to consider not only the average normal daily wage, but the number of days employed throughout the year. How will this be ascertained? Will a person go to the pay-roll of a given firm? It will show that certain persons were employed so many days. It will not show what they did the remainder of the time. Will you find out the individual laborer and ask him how many days he has been idle or what his average wages have been? Outside of a general notion, he cannot tell you, because he keeps no account. Thus it is, that the more specific one attempts to become, the more difficulties arise

in scientific exactness. Suppose all the firms kept a strict account of everything: even then the work of the investigator is not light, for each one would keep his accounts in his own way. Before anything could be done they must be reduced to a common basis of measurements, which reduction might be quite impossible in certain cases. Before anything of value can be done, a classification of all topics discussed, on proper blanks prepared for the purpose, will be necessary.

The purpose having been clearly defined, it will not be difficult to arrange the material under different topics. Under each subhead should be classified the material as gathered. Great pains should be taken in regard to exactness of the details, otherwise the result will be too inexact for use. Owing to the irregularities which one finds in the actual economic conditions, only a reasonable degree of probability can be ascertained through any statistical determination; and if carelessness prevails in the collection of these facts, the degree of probability is so far removed from the exact conclusion as to be practically worthless. If one has to work in the library, a complete outline of the subject should be made, by which one would proceed from step to step to the conclusion sought. Great care should be taken in the arrangement of this outline to exclude all irrelevant matter. Yet in reading one should beware not to carry this process of exclusion too far, otherwise the investigator will make a wrong interpretation and use of what has been clearly stated. To take a paragraph out of the order of the chapter without reference to the remaining portion might lead to a wrong use of its con-

tents in establishing any given proposition; therefore, it is quite necessary, for the proper interpretation of authors, writers, or library material, to read widely enough to grasp the whole matter.

In making the outline one should consider very carefully the various references under each subject. Before one has gone very far on the way as an investigator, he must know the general scope of the subject and the material with which he has to deal. Therefore, attached to the general outline should be a system of references of classified material. It is indispensable, also, to have a system of recording and general note-taking. Perhaps the card system is the most convenient of all. A series of cards arranged alphabetically and in different classes for the purpose of recording and classifying material, should be arranged. Class A should be sources, either library work or actual observation; Class B, authorities; Class C, secondary material, etc. On each card should be recorded the title and the nature of the contents of the book or manuscript. A system of note-taking is best arranged by the card system, for in any statistical investigation, whether carried on in the library or in actual field work, it is not possible for the investigator to carry in his mind all the details of the investigation. He desires to take notes from observation or from reading. In case of a systematic investigation the blank when filled will represent a logical method of note-taking; but even in this case supplementary notes may be necessary. In case of library investigation, notes are usually of two kinds: First, a direct quotation of important statements or statistics; second, a summari-

zation of book, page or chapter in the investigator's language. Great care should be taken in both cases to attach to the note the exact references of the location of the quotation or statement, giving book, chapter, titles, page, etc. Excessive care is necessary to make the quotation exact, but even greater care is necessary that the investigator understand the author, and that he draw the proper conclusion in his own language. Investigators frequently deceive themselves and others from lack of proper interpretation of writings or representation of facts. Therefore the utmost care in discernment and representation is necessary.

Accounting and Comparing.

Enumeration is not easy, at best, for it is difficult to determine first the article to be enumerated. If a basket containing oranges, apples, watermelons, cantaloupes, turnips and peaches should be presented to a child, and he were asked to count the number of pieces of fruit in the basket, he would be somewhat puzzled as to what should be called fruit and what vegetable—the difficulty of determining a unit of counting. Ask the pupils to count the number of pieces of chalk in the blackboard receptacle, and they may have a very difficult task of what seems a very simple matter,—for there are all sizes, from the full crayon to the minutest particle of dust. What constitutes a piece of chalk must be determined before they can proceed. Nearly all the difficulty in economic theory arises from this very point of the definition of terms,—merely the fact of counting. Authors use such terms as profits, interest, rent, and wages, in different senses, and therefore reach different

conclusions. The scope and meaning of the term used are not the same in the minds of different individuals, therefore controversy as to conclusions arises. The same idea prevails in the gathering of statistics. The counting must be a process of definition and exclusion. The difficulty in field work is that of observation. This must be carried on with great accurateness or the facts in the case will not be recorded. To take in all the conditions that may arise and use only the data necessary for reaching the conclusion, requires practice and skill. In the first place, economics treats of the relation of man to wealth, and the economist must touch upon human nature, which is a variable quantity. The geologist dealing with rocks without life, the chemist with organic and inorganic matter, the biologist with life under his control, have more or less permanency in the material on which they operate; while the economist must operate upon material with its own individual activity. In other words, the laborer may refuse to disclose his condition or the capitalist the nature of his business. More than this, owing to the variability of human nature, when an honest attempt is made to reach a conclusion the condition and nature of the mind will render this more or less uncertain. Hence, in all economic investigations comparison is absolutely necessary in order to determine the relative value of information. This comparison should be carefully observed in all material, and every bit of information should be considered as to its degree of accuracy, modified more or less by detracting influences.

Examples of Methods of Investigation.

A few examples of methods of investigation are here given, merely for the purpose of suggestion. They are not

in themselves models, but rather suggestions of methods of procedure; for all methods of procedure must vary more or less, according to the conditions under which individuals work. The first one, on labor, is an outline for a general discussion of the subject, including the work in the library and actual investigation in the field. It is rather suggestive to beginners who desire to make a prolonged investigation of the subject. Some of these outlines were originally made by students in economics in the University of Kansas, under the direction of the writer. Those on railroads represent various phases of general topics, and were made through the study of the legal and economic aspect as reported in statistical reports, laws, and decisions of the courts. Those regarding packing-house employés and coöperation in England and the Pullman strike were made from actual observation. There is no uniformity of representation, for the reason that it is better that methods should be suggestive rather than ideal, as better results can be obtained from student investigators. Scores of subjects could be obtained in the economic field for investigation; and as students become more scientific and better opportunities are offered for investigation, a single sub-topic under these broad generalizations may be sufficient for investigation.

EXAMPLE 1. *The Labor Question.* An economic investigation to determine the relations of labor to capital. (This is an example of covering a large field to determine general results. While it is excellent for general knowledge, it is not as profitable as a small subject thoroughly worked out for specific results.)

A. Wages.

1. The origin of the wage system.

2. Laws of wages.
 - (a) Scientific law of wages.
 - (b) Iron law of wages.
 - (c) Wage-fund theory.
 3. The relation of labor-income (wages) to other branches of industry.
 - (a) Relation of wages to capital-income.
 - (b) Relation of wages to net product of labor.
 - (c) Relation of real wages to nominal wages.
 4. Influences upon wages.
 - (a) The sliding scale of wages.
 - (b) The tariff.
 - (c) The eight-hour law.
 - (d) Trusts and monopolies.
 - (e) Free land.
 - (f) Improved machinery.
 5. Proposed abolition of the wage system.
- B. Labor organization.
1. Origin and growth of organizations.
 2. Classification of labor organizations.
 3. Aims of labor organization.
 4. Influence of organizations upon their members.
 5. Relation of organizations to strikes.
 6. Relation of organizations to production.
 7. Relation of organizations to wages.
 8. Relation of organizations to politics in the United States.
 9. Tendency towards universal organization.
 10. Weakness of organizations.
 11. Needs of organizations.
- C. Conflicts between labor and capital.
1. Statistics of strikes and lockouts.
 2. The moral effect of conflicts of labor and capital.
 3. The effect on wages.
 4. Convict labor—a cause.
 - (a) Four systems—lease, piece, public, and contract.
 5. Methods of conciliation.
 - (a) Private agreement on a wage scale.
 - (b) Arbitration.
 - i. Compulsory.
 - ii. Voluntary.
 6. Cost of controversies.

7. Importance of unity in civilization.
- D. The settlement of the labor problem.
 1. By improved conditions of labor:
 - (a) In respect to—
 - i. Health.
 - ii. Education.
 - iii. Morals.
 - iv. Social relations.
 - v. Economic condition.
 - (b) To be accompanied by legislation.
 - i. To make laws for—
 - Protection of life.
 - Security of wages.
 - Settlement of disputes.
 - Restricting employment of women and children
 - Limiting hours of a day's work.
 - Regulating labor contracts.
 - Regulating trusts and monopolies.
 - ii. To create commissions to enforce laws.
 - iii. To restrict immigration.
 2. By better organization of industry by means of—
 - (a) Coöperation.
 - (b) Profit-sharing.
 - (c) State regulation.
 - (d) State ownership.

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EXAMPLE 2. *Railroad Rates.* An economic investigation to determine whether rates are decreasing more rapidly than expenses.
 I. Development of tariffs.

A. Classification of freight.

References: Report of Interstate Commerce Com., 1888, pp. 34-41; Hadley, Railroad Transportation, pp. 112, 113; 11th Annual Report Interstate Commerce Commission, pp. 62-71.

B. Discrimination.

References: Stickney, Railway Problem, pp. 45-71, 154-161; Hadley, Railroad Transportation, pp. 100-125; Dixon, State Railroad Control, pp. 48-75; Kirkman, Rates and Government Control, pp. 67, 95, 97, 123, 127. Pop. Sc. Mo., 28:424.

C. Competition.

References: Hadley, Railroad Transportation, pp. 63-99; Stickney, Railway Problem, pp. 58-71, 36-44; Kirkman, Railroad Rates.

II. Theories of Rates.

A. Cost of Service.

References: Hadley, Railroad Transportation, pp. 108-9, 261-5; Stickney, Railway Problem, pp. 45-6; Kirkman, Railroad Rates and Government Control, pp. 19, 74, 83, 220.

B. Value of the service on what the traffic will bear.

References: Hadley, Railroad Transportation, pp. 16-7, 110-1, 261-5; Kirkman, Railroad Rates and Government Control, pp. 13, 30-2, 43; Econ. Jr., 5:438, 7:317; An. Am. Acad., 3:102, 5:335, 11:324.

III. State control or regulation of rates.

A. By ownership of roads.

References: Hadley, Railroad Transportation, pp. 203-258; Kirkman, Railroad Rates and Government Control, pp. 219-231; Amer. Law Rev., 18:302.

B. By legislative enactment.

(a) Maximum rates.

References: Hadley, pp. 129-134; Dixon, pp. 26-30; Kirkman, pp. 24, 40, 123.

(b) Commissions.

References: Hadley, pp. 135-141; Dixon, pp. 150-56, 194-97; Larrabee, The Railroad Question, pp. 428-30, 381; Amer. Econ. Assn. Pub., 6:477; Eng. Mag., 9:623; Pol. Sc. Quart., 11:201.

(c) Reasonable rates.

References: Dixon, pp. 38-41; Larrabee, pp. 376-88, 361, 365; Kirkman, pp. 14-15, 18, 45, 199; An. Amer. Acad. Pol. Sc., 5:335; Nation, 66:260; Rev. of Rev., 17:402; Pub. Opinion, 24-330; Index Interst. Com. Com. Repts.

IV. Present rates in the United States.

A. Compared with rates of other countries.

References: Hadley, p. 104; Larrabee, pp. 370-3.

B. Compared with former rates.

References: Hadley, pp. 104-8; Dixon, pp. 43-44; Larrabee, 374-5, 417; Kirkman, pp. 27, 175; 8th An. Rept. of Statistics of R. R. in U. S., p. 142; Pop. Sc. Mo., 47:186; Jr. Pol. Econ., 6:457; An. Statistical Assn., 6:115; Forum, 18:250; Interstate Com. Com. Repts., 1898, p. 35; 1890, p. 70.

V. Effect of pools.

References: Larrabee, pp. 189-204; Kirkman, pp. 95-116, 129-48; 11th An. Rept. Interstate Com. Com., pp. 48-51; Eng. Mag., 1:105; Forum, 20:519; Index Interstate Com. Com. Repts.

General suggestions for concrete investigation: Interview shippers and railroad officials; examine schedule of rates and railroad books.

EXAMPLE 3. *Interstate Commerce Law.* An economic investigation to determine the present state of such laws.

I. History of the attempts of the states to regulate the business of carriers.

References: Case of *Munn v. Ill.*, 94 U. S. 113; *C. B. & Q. R. v. Ia.*, 94 U. S. 155; *Peck v. Chicago and North Western R. R.*, 94 U. S. 164; *Wabash, St. Louis and Pacific R. R. v. Ill.*, 118 U. S. 557.

II. Legal meaning of and liability of "common carrier." Any text on Bailment.

III. Read the law carefully to discover—

1. Its purpose and object.
2. The means prescribed for accomplishing this object.
3. Punishment for disobedience.
4. To whom the act applies.
5. Who are especially excepted from its operation.
6. When is the common carrier excepted from its provisions?
7. What constitutes the commission.
8. The qualifications of a commissioner.
9. The powers of the commission.
10. Who may make complaint before the commission.
11. The effect of the decision of the commission.

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EXAMPLE 4. *Railroad Accidents.* An economic investigation to determine the cause of accidents, and by what means they may be minimized.

A. Who are victimized in railroad accidents?

(Interstate Commerce Commission Reports, 1889-98;
 Bank. Mag., 53:827; Jr. Sc., 127; Am. Arch., 11:218.)

I. Number killed and wounded annually.

(a) Employés.

(b) Passengers.

(c) Trespassers and non-trespassers.

II. Number by groups.

(Interstate Commerce Commission Reports, 1889-1898.)

B. How many kinds of accidents.

(Interstate Commerce Commission Reports.)

I. Accidents of the first class.

1. Enumerated.

- (a) Coupling and uncoupling cars.
- (b) Falling from trains and engines.
- (c) Overhead obstructions.

2. Number of individuals killed and injured in first class.

II. Accidents of the second class.

- (a) Collisions—Rear end, head end, and side.

(F. C. Adams, R. R. Accidents, pp. 61-2, 144-52, 265.)

- (b) Derailments.

(Adams, pp. 13, 16, 23, 54, 79, 84, 118, 120.)

- (c) Number of individuals killed and injured, of each class of victims.

III. Accidents of the third class.

1. Enumerated.

- (a) Other train accidents.

- (b) At highway crossings.

(Adams, pp. 165, 170, 244, 258.)

- (c) At stations.

(Adams, p. 166.)

- (d) Other causes.

2. Number killed and injured of each class of victims.

C. What are the causes of railroad accidents?

(Adams, R.R. Accidents, pp. 12, 16, 67, 72, 82, 89, 100, 106, 111, 117, 265.)

I. Patent causes.

1. Overtaxed trainmen.

(Recent R. R. Accidents, Pop. Sc. Mo., 44:314.)

2. Rapid transportation.

(Pop. Sc. Mo., 44:314.)

3. Lack of proper signal system.

(Adams, p. 86.)

4. Too dense traffic upon one track.

(Pop. Sc. Mo., 44:314; No. Amer., 157:707.)

5. Mistaken or missent train orders.

(Adams, pp. 66, 69.)

6. Unskilled employes.

- (a) Negligence. (Adams, p. 125; No. Amer., 157:777.)

- (b) Mistakes of officers or servants. (Adams, p. 125; No. Amer., 157:707.)

II. Latent causes.

1. Defective machinery—track, wheels, axles, and couplings.
2. Poorly constructed cars, track and bridges.

(Adams, pp. 58, 117, 46, 98, 99, 107, 166, 206, 266.)

D. What preventives of railroad accidents are there, and how many are available for use?

(Barry's R.R. Appliances; Interstate Commerce Commission; Adams, pp. 19-70; Pub. Opinion, 2:273.)

I. Automatic car-couplers—a necessity.

(Cong. Record, 52d Cong., Vol. 24, Part 3.)

II. Automatic train brakes—a substitute for hand brakes.

(Adams, pp. 21, 125, 190.)

(a) Number in use, and result.

III. Interlocking signal system.

(Adams, pp. 97, 182, 192, 194-196; Barry's R. R. Appliances, p. 113; 2d Annual Report Mass. R. R. Com., p. 141.)

IV. Block signal system.

(Adams, pp. 43, 47, 51, 255.)

E. Cost of accidents.

(Adams, p. 267.)

(a) Employers' liability acts. (See statutes of various states.)

EXAMPLE 5. *Canals and Their Relation to Railroads.* An economic investigation to determine relative cheapness of transportation by rail and by water.

I. The history of canal building.

Eclectic Eng., Vol. 10, p. 227.

E. J. James—Am. Econ. Assn. Pub., Vol. V.

II. The advantages of railroads over canals.

1. Any locality may be reached.

James—Niles Register, Apr. 30th, July 30th, 1825.

E. H. Derby—Harper, Mar. 1880.

2. The rate of travel is greater.

E. J. James—Eclectic Eng., Vol. 21, p. 381.

3. Capacity of railroads unlimited; that of canals limited.

L. M. Haupt—Amer. Ec. Assn. Pub., Vol. V.

E. J. James.

4. Canals limited by seasons of the year.

E. J. James.

5. No losses as in the case of absorption in canals.

E. J. James.

III. Advantages of canals.

1. They develop the country.
Eclectic Eng., Vol. 10, p. 227.
2. They join water-ways.
E. J. James.
3. Cost of transportation by water is less than by rail.
L. M. Haupt.
4. Canals carry heavy traffic.
E. J. James.
5. Benefit railways.
E. J. James.

EXAMPLE 6. *Productive Coöperation in England.* An economic investigation to determine the possibility of the success of productive coöperation.

I. The present condition of coöperation.

- A. As shown by exhibition at Crystal Palace, Aug. 18-22, 1896.
- B. As learned by association with labor leaders of England.

II. The failure (till 1870) of productive coöperation, but success of distributive coöperation.

- A. Due to greater difficulty of management.

III. Review of success and failure of coöperation.

- A. The Rochdale Pioneers. (Successful productive enterprise.)

1. The meager beginning.
2. Present condition of the society; membership, number of establishments, capital, annual business, profits.
3. Effect upon country of establishing societies.

- B. The Labor Association. (1884.)

1. Purpose—to form public opinion on the subject of associated labor.
2. Means—lectures, publications, conferences, etc.

- C. Hebden Bridge Fustian Mfg. Coöperating Societies.

1. Organized 1870.
2. Poverty of association and members.
3. Growth illustrated by table.

IV. General methods existing among the societies.

- A. Division of profits with purchasers.
- B. Setting aside amounts for education, sick, etc.
- C. Establishment of stores.
- D. Division of gross profits.
- E. Management of society.

V. Summary of growth of coöperation as shown by table.

VI. Conclusion.

A. Objects aimed at.

(a) To benefit the laborer.

(b) To benefit the employer.

B. Beneficial effect of productive coöperation on society.

EXAMPLE 7. *The Condition of the Packing-House Employés* (in Armour Packing House, Kansas City, Mo.). An economic investigation to determine the standard of life of the laborers.

I. Location.

II. Study of the plant by departments.

A. The following departments:

Canning room, tin shop or canners' room, lithography, boning room, poultry room, sausage room, tank room, hog-killing, carpentering and brick masonry, hog-cutting.

Supply Department—Sausage trimming, curing, smoking and pickling, laundry, hog-cleaning, ice plant, butterine, tin shop, fertilizer, hides, neutral, store room, packing and lard, car shops, machine shops, carpenter shops, paint shop, glue, fire department, cooperage, lard, box house, sheep, market pigs, beef killings, beef casing, new tank room, oleo oil, electric light plant, No. 3 engine house, local shipping, packing room, livery stable, roustabouts, unloading, beef loading.

B. Study for the purpose of obtaining information in respect to—

1. Number of persons employed (men, boys, women, girls, negroes).
2. Pay. (Compare as to sex, age, color, etc., for same work.)
3. Moral character of employés.
4. Length of time employés have been at the same work.
5. Kind of men, as to intelligence, industriousness, and sobriety.
6. Membership in lodges or societies, life insurance.
7. Provision made by owner for comfort and health of employés.
8. Healthfulness of different kinds of work.
9. Summary and conclusions drawn.

III. Study of surroundings and places of living.

A. Restaurants and eating-houses.

1. Company restaurant.
2. Other restaurants.
3. Saloons.

B. Homes of employ  s (in west bottoms). Noted as to —

1. Cleanliness.
2. Crowded condition.
3. Sources of supplies.
4. Rents.
5. Character of persons.

C. Gambling-houses.

D. "The Patch."

E. Churches.

F. Schools.

IV. Suggestions for needed improvements.

EXAMPLE 8. *The Municipal Government of Berlin.* An economic investigation to determine the success of scientific methods of municipal government.

I. Introduction.

A. Location of city. On rivers.

B. Rapid growth of city. Reasons for —

- (a) Location of the ruling families there.
- (b) Power of organization and scientific methods in public works

II. Machinery of city government.

A. Council.

(a) Elected.

1. Qualifications of electors.

(b) Number of members — 128.

(c) Power.

1. Appoint Burgomeister (Mayor).
2. Choose committee of magistrates — 30.

B. Police.

(a) How appointed.

1. Regular police by the State, and paid by the State.
2. Watchmen appointed and paid by the city.

(b) Powers.

1. Complete enforcement of all laws.
2. Collection of full information in regard to all citizens, temporary or permanent.

III. City government as found in municipal affairs.

A. Means of communication.

1. Post.
2. Post express.
3. Pneumatic tube.
4. Telephone.

B. Means of transportation.

1. Kinds.
 - (a) Horse cars.
 - (b) Electric cars.
 - (c) Steam railway.
2. Management.
 - (a) Private ownership.
 - (b) Regulation by the city.
3. Methods of construction.

C. Street pavements.

1. Construction.
2. Care.

D. Care of public health.

1. Cleaning of streets.
2. Sewerage system.
3. Park system.
4. Disinfectant houses.
5. Meat inspection.
6. Water-supply.
7. Supervision of building construction.

E. Lighting.

1. Gas — city and private company.
2. Electric — private company.

F. Granting franchises.

1. Gas.
 - (a) Reservations by the city.
 - (b) Per cent. of receipts required by city.
 - (c) Privilege of city to extend service at will.
 - (d) Regulation of charges.
 - (e) Right to purchase by city.
2. Railway.
 - (a) Bonus to city.
 - (b) Yearly percentage of earnings to city.
 - (c) Passes to city after certain length of time.

G. Care of poor.

IV. Conclusion.

- A. City of Berlin a business corporation.
- B. Lessons drawn for American cities.
 - 1. Economy in all departments.
 - 2. Necessity for business ability and methods.
 - 3. Should not be a political machine.

EXAMPLE 9. *The Prussian Railroad System.*

I. History of the Prussian railroad system.

II. Laws regulating the public carriers, especially railroads.

III. Laws relating to the construction and operation of railroads.

IV. State and private ownership of railroads.

- 1. How state ownership was brought about.
- 2. Number of miles operated by the state.
- 3. Number of miles operated by private corporations.
- 4. Advantages and disadvantages of the state system.

V. Tariffs.

1. Freight.

A. Classification of freight tariff and freight.

2. Passenger tariffs or fares.

A. Classification.

- 3. Earnings — gross, net, gross passenger, net passenger, gross freight, net freight.

VI. Expenditures.

- 1. For extension of roads or construction of new lines.
- 2. For repair of tracks, bridges, etc.
- 3. For maintenance of road-bed.
- 4. For new depots and repairs to old ones.
- 5. Purchase, construction and repairing of engines.
- 6. Purchase, building and repairing passenger and freight cars.
- 7. Salaries.

VII. Employés.

1. Classification of employés.

A. Officers.

B. Clerks.

C. Workmen.

2. Wages of employés.

3. Laws relating to employés.

A. As to entrance into the service.

B. As to length of service.

- C. As to promotion.
- D. As to privileges.
- E. As to dismissal.
- F. As to operation.
- G. Education.
- H. Length of working day or working period.

VIII. Hospitals.

IX. Libraries, reading-rooms, etc.

X. Industrial schools.

XI. Other educational institutions for training of employ  s, nurses, etc.

XII. Statistical tables to accompany each of the above subjects.

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The following additional topics for investigation are given for students:

The legal status of trusts.

The economic effect of trusts.

The economic effect of excessive life insurance.

The economic advantages of speculation.

The evil effects of illegitimate speculation.

To what extent is a labor organization a trust?

The question of strikes.

Effect of labor organizations on wages.

An inquiry into the standard of life of laborers.

Economic effect of irrigation.

Consumption of laborers.

The economic effect of suburban and rural electric lines.

Monopoly and monopoly profits of railroads.

Excessive capitalization of "industrials."

The wages of miners in relation to the price of coal, etc., etc.

(This list may increased as needed.)

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